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**Project** 

On

# "Child Learning Game"

Submitted to Shiksha Mandal's

# G. S. COLLEGE OF COMMERCE & ECONOMICS, NAGPUR (AUTONOMOUS)

In the Partial Fulfilment Of

**B.Com.** (Computer Application) Final Year

**Submitted by** 

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**Under the Guidance of** 

Pravin J. Yadao



Shiksha Mandal's

G. S. COLLEGE OF COMMERCE & ECONOMICS, NAGPUR

(AUTONOMOUS)2022-2023 Shiksha Mandal's

# G. S. COLLEGE OF COMMERCE & ECONOMICS, NAGPUR (AUTONOMOUS)

# CERTIFICATE (2022 - 2023)

This is to certify that Mr. <u>Deepesh R. Kalbhor and Mr. Aditya B. Naoghare</u> has completed their project on the topic of <u>Child Learning Game</u> prescribed by G. S. College of Commerce & Economics, Nagpur (Autonomous) for B.Com. (Computer Application) – Semester-VI.

Date:	
Place: Nagpur	
	Pravin J. Yadao
	Project Guide

**External Examiner** Internal Examiner

**ACKNOWLEDGEMENT** 

We take this opportunity to express our deep gratitude and whole hearted thanks

to project guide Prof. Pravin Yadao, Coordinator for his guidance throughout this

work. We are very much thankful to him for his constant encouragement, support

and kindness.

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Prof. Preeti Rangari, Prof. Prajkta Deshpande and Prof. Haresh Naringe for their

encouragement, help and support from time to time.

We also wish to express our sincere thanks to Principal Dr. Swati S. Kathaley for

providing us wide range of opportunities, facilities and inspiration to gather

professional knowledge and material without which this project could not have

been completed.

Deepesh R. Kalbhor

Aditya B. Naoghare

Date:

Place: Nagpur

3

**Declaration** 

We Mr. Deepesh R. Kalbhor and Aditya B. Naoghare here by honestly declare

that the work entitled "Child Learning Game" submitted by us at G. S. College of

Commerce & Economics, Nagpur (Autonomous) in partial fulfilment of requirement

for the award of B.Com. (Computer Application) degree by Rashtrasant Tukadoji

Maharaj, Nagpur University, Nagpur has not been submitted elsewhere for the award

of any degree, during the academic session 2022-2023.

The project has been developed and completed by us independently under the

supervision of the subject teacher and project guide.

Deepesh R. Kalbhor

Aditya B. Naoghare

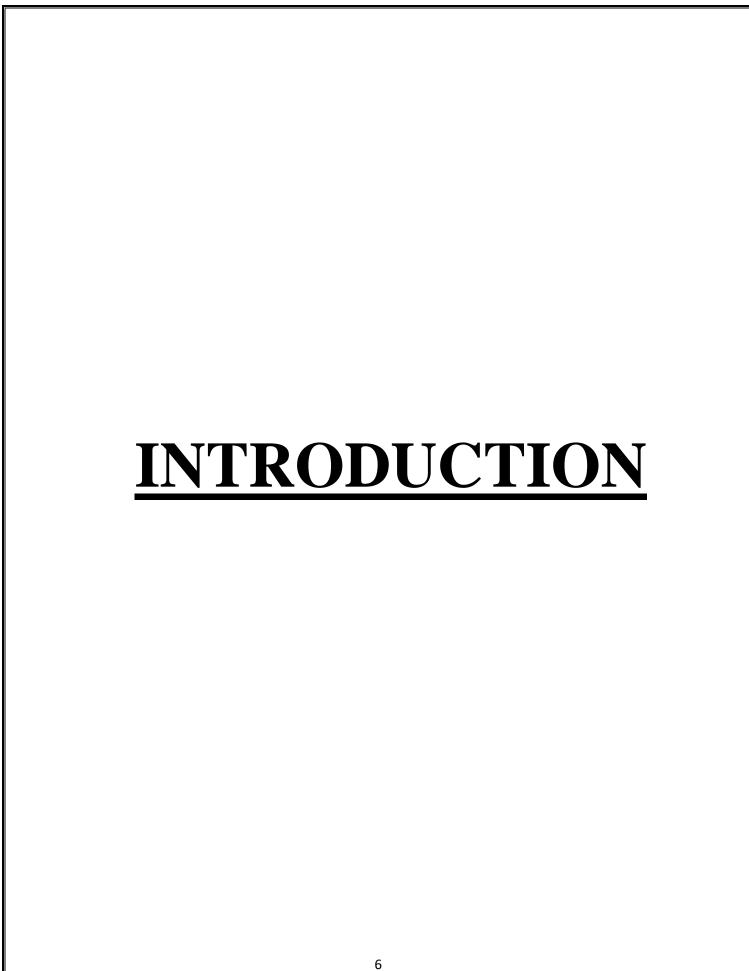
Date:

Place: Nagpur

4

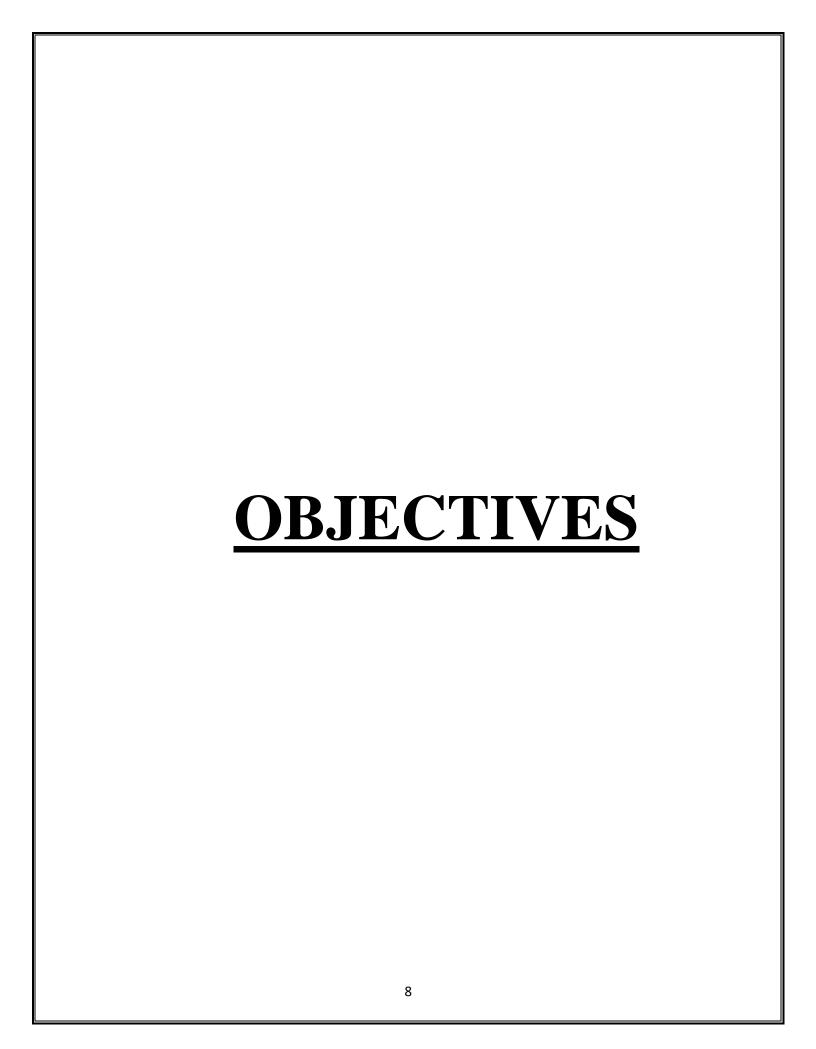
# **INDEX**

Sr. No	Particulars	Page No	Sign	Remark
1.	INTRODUCTION	6-7		
2.	OBJECTIVES	8-10		
3.	PRELIMINARY SYSTEM			
	ANALYSIS			
	3.1 Preliminary Investigation	11-17		
	3.2 Present System In Use			
	3.3 Flaws In Present System			
	3.4 Need For New System			
	3.5 Feasibility Study			
4.	3.6 Project Category  SOFTWARE AND	18-19		
4.	HARDWARE REQUIREMENT	18-19		
	SPECIFICATION			
5.	DETAILED SYSTEM			
	ANALYSIS			
		20.21		
	Data System Analysis	20-21		
6.	SYSTEM DESIGN			
	6.1 Source Code	22-101		
	6.2 Input Screen and Output Screen	22 101		
7.	TESTING AND VALIDATION	102-104		
	CHECKS			
8.	SYSTEM SECURITY			
	MEASURES	105-116		
	8.1 Implementation			
	8.2 Evaluation			
0	8.3 Maintenance	117 110		
9.	FUTURE SCOPE OF THE PROJECT	117-118		
10.	CONCLUSION	110 120		
		119-120		
11.	BIBLIOGRAPHY &	121-122		
	REFERENCES			



Now a days gaming has became a very effective way to make people learn something new and improve their capabilities. Gaming has created its own huge world today. People play it as fun, entertainment also to learn.

In our application we have introduced different types of games which are very helpful in many ways. They are competitive and helps to build our confidence. Games are becoming more user friendly as the time goes on. Smartphone users account for about 40% of the mobile phone market, considering the awareness among youngsters and the current trend as well as the cheaper rates. Many of these users enjoy playing games on their mobile phones. Having your favourite game in your mobile devices is in itself a mark of remarkable gesture.



#### • Improve Cognitive Skills

This application is mainly to boost cognitive skills which will help to think logically and take your every decision smartly. One has to constantly find ways and solutions to win the game; its the best way to exercise your brain.

#### Boost Concentration

It is very important to concentrate on particular things. Whether you are studying or doing anything, having good concentration power is so important. This applications will help you to improve your concentration which will definitely help you to stay focused on a particular work.

#### Behavioural Improvement

This application will mainly builds a behaviour of confidence and finding ways in difficulties. It will help to make a solution in different aspects of daily life. It will help to improve your behaviour.

#### • Enhance Creativity

This application focuses on enhancing your creativity. It will help you to think in innovative ways. And it aims to help you to challenge yourself to make creative opportunities to find your ways.

#### Improve Thinking Skills

Learning to think critically may be one of the most important skills that today's children will need for the future. This application aims to improve thinking skills and to think critically.

#### • Improves Memory

The more challenges you face, the quicker you will drop these notes as your brain will retain the information naturally. Through this application you will boost your memory power.

#### • Improves Motor Skills

This application will help your kid to be more active in their life and in play grounds.

They will actively participate in other outdoor games too.

#### • Improves Logical Thinking

This application will help you to improve your logical thinking as the games will level up and go on harder and harder.

#### • Gives a sense of accomplishment

When a player successfully finishes the level infuses a player with the sense of accomplishment and satisfaction and confidence. Harder the game goes more of the joy players feels after completing it successfully.

### Helps kids develop their problem-solving skills

This application will definitely help your kid to develop a behaviour of problem solving. This application will help you kid inculcate this attitude which will help your kid in their life too.

#### Vocabulary Boosters

This application will help kids for fun and to learn simultaneously. Poems and alphabets will help your kid to learn new vocabularies.

PRELIMINARY SYSTEM ANALYSIS

#### **Preliminary Investigation**

Preliminary investigation is the first step. In this step, the system is investigated. The objective of this step is to conduct an initial analysis and findings of the system.

While searching for an idea we had only one think in our mind that it must be useful for the user. So, we come up with an idea to build an application with different types of games so it may explore user's mind. It may help user not only in their present but also for future.

#### **Present System In Use**

Present system is all about enhancing the knowledge and skills of a child. Also helps your kid to learn new vocabularies and also to boost their confidence. It contains crossword game, memory matching game and alphabet game.

With alphabet pictures will be shown and with crosswords words will be provided. This app will be easy to use and understand.

#### **Flaws In Present System**

In present system it might be difficult for younger kids to play number crossword game. They may find it difficult to play and understand so might be they will not be interested in playing that game. Present system does not provide videos for anything.

#### **Need For New System**

Current application is somewhere has its limitations. With a new system we may fill all the required requirements which current application doesn't have.

It has limited games and limited things for kids but with new system we may provide more. We may be giving videos more frequency and also fast service.

With new system we can also improve security and store large amount of data.

#### **Feasibility Study**

As name suggests feasibility study is the feasibility analysis or it is a measure of the software product in terms of how much beneficial product development will be for the organization in a practical point of view. Feasibility study is carried out based on many purposes to analyse whether software product will be right in terms of development, implantation, contribution of project to the organization etc.

#### I. Technical Feasibility

This assessment focuses on the technical resources available to the organization. It helps organizations determine whether the technical resources meet capacity and whether the technical team is capable of converting the ideas into working systems. Technical feasibility also involves the evaluation of the hardware, software, and other technical requirements of the proposed system. As an exaggerated example, an organization wouldn't want to try to put Star Trek's transporters in their building—currently, this project is not technically feasible.

#### II. Economic Feasibility

This assessment typically involves a cost/ benefits analysis of the project, helping organizations determine the viability, cost, and benefits associated with a project before financial resources are allocated. It also serves as an independent <u>project assessment</u> and enhances project credibility—helping decision-makers determine the positive economic benefits to the organization that the proposed project will provide.

#### **III. Social Feasibility:**

Social Feasibility is a determination of whether this proposed system will be acceptable to the people or not. This determination typically examines the probability of the project accepted by the group directly affected by the proposed system change.

• It describes the effect on users from the introduction of the new system considering whether there will be need for retraining the workforce.

	propose to ensure us	er co-operation be	fore changes are
introduced.			

## **Project Category**

The Project Category is an application called "KIDS LEARNING GAME". This application is designed using C#.NET language. From starting page to ending page we have many pages linked together containing different information. Our application is a gaming and kids application which helps them for fun and learn simultaneously.

#### **Programming Language Used In Project**

#### C#.NET

C# is a modern, general-purpose, object-oriented programming language developed by Microsoft and approved by European Computer Manufacturers Association (ECMA) and International Standards Organization (ISO).

C# was developed by Anders Hejlsberg and his team during the development of .Net Framework.

C# is designed for Common Language Infrastructure (CLI), which consists of the executable code and runtime environment that allows use of various high-level languages on different computer platforms and architectures.

#### The following reasons make C# a widely used professional language –

- It is a modern, general-purpose programming language
- It is object oriented.
- It is component oriented.
- It is easy to learn.
- It is a structured language.
- It produces efficient programs.
- It can be compiled on a variety of computer platforms.
- It is a part of .Net Framework.

#### **History of C#.NET**

History of C# language is interesting to know. Here we are going to discuss brief history of C# language.

C# is pronounced as "C-Sharp". It is an object-oriented programming language provided by Microsoft that runs on .Net Framework.

Anders Hejlsberg is known as the founder of C# language.

It is based on C++ and Java, but it has many additional extensions used to perform component oriented programming approach.

C# has evolved much since their first release in the year **2002**. It was introduced with **.NET Framework 1.0** and the current version of C# is 5.0.

#### **C#.NET Features**

Although C# constructs closely follow traditional high-level languages, C and C++ and being an object-oriented programming language. It has strong resemblance with Java, it has numerous strong programming features that make it endearing to a number of programmers worldwide.

Following is the list of few important features of C# –

- Boolean Conditions
- Automatic Garbage Collection
- Standard Library
- Assembly Versioning
- Properties and Events
- Delegates and Events Management
- Easy-to-use Generics
- Indexers
- Conditional Compilation
- Simple Multithreading
- LINQ and Lambda Expressions
- Integration with Windows

Software And Hardware Requirement Specification

#### **Hardware**

Hardware, which is abbreviated as HW, refers to all physical components of a computer system, including the devices connected to it. You cannot create a computer or use software without using hardware. The screen on which you are reading this information is also a hardware.

• RAM :4GB and Above

• Hard disk: 320 GB and Above

Keyboard

Mouse

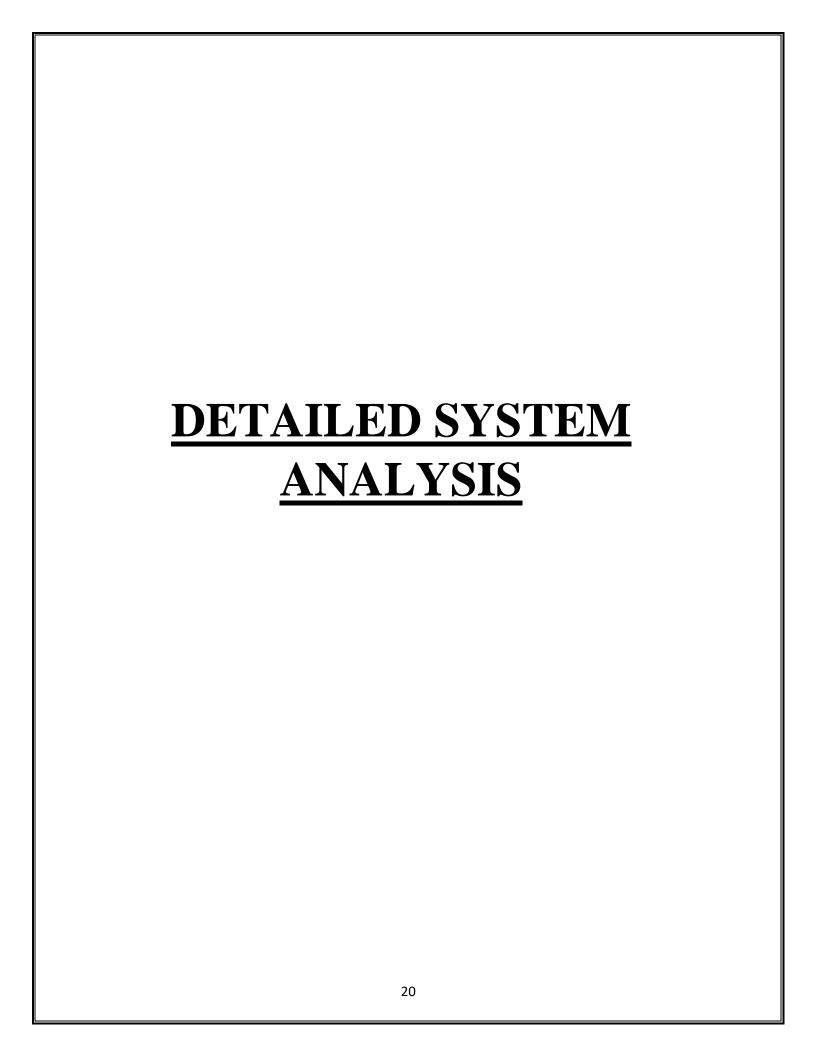
#### **Software**

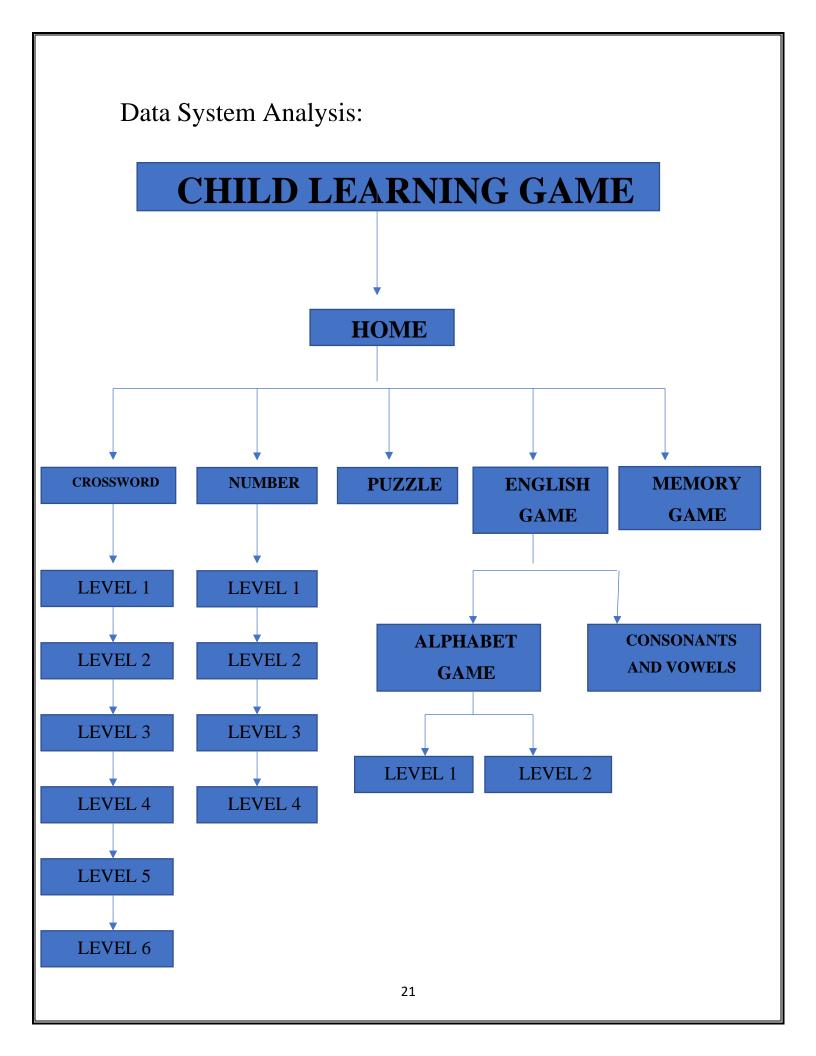
Software is a set of instructions, data, or programs used to operate a computer and execute specific tasks. In simpler terms, software tells a computer how to function. It's a generic term used to refer to applications, scripts, and programs that run on devices such as PCs, mobile phones, tablets, and other smart devices. Software contrasts with hardware, which is the physical aspects of a computer that perform the work.

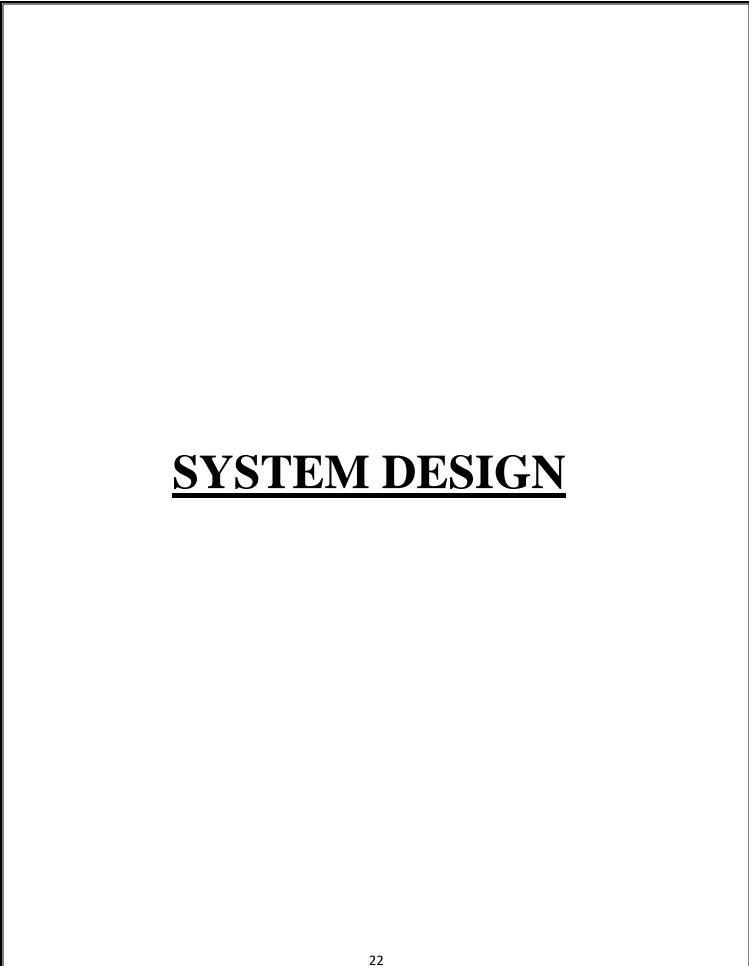
• Microsoft Window 10

#### **Operating System**

• Windows 10







### **Source Code:-**

## **Home Page**

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Ling;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
namespace Final_Child__Learning_Games
  public partial class Form1: Form
    public Form1()
       InitializeComponent();
    private void btnNum_Click(object sender, EventArgs e)
       Num_1 N = new Num_1();
       N.ShowDialog();
    private void btnCrossword_Click(object sender, EventArgs e)
       Cros1 c1 = new Cros1();
       c1.ShowDialog();
    private void btnPuzzle_Click(object sender, EventArgs e)
       Puzzle q=new Puzzle();
```

```
q.ShowDialog();
}

private void btnEnglish_Click(object sender, EventArgs e)
{
    English_levels El= new English_levels();
    El.ShowDialog();
}

private void btnMemory_Click(object sender, EventArgs e)
{
    memory_game MG= new memory_game();
    MG.ShowDialog();
}
```

#### **CROSSWORD GAME -**

#### **Crossword Game Level 1:-**

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
namespace Final_Child__Learning_Games
  public partial class Cros1: Form
    public Cros1()
       InitializeComponent();
    private void button9_Click(object sender, EventArgs e)
       lbl1.Text = "";
       lbl2.Text = "";
       lbl3.Text = "";
    private void pictureBox2_Click(object sender, EventArgs e)
    private void btnA_Click(object sender, EventArgs e)
       if (lbl1.Text == "")
         lbl1.Text = "A";
```

```
else if (lbl2.Text == "")
  { lbl2.Text = "A";}
  else
     lb13.Text = "A";
}
private void btnE_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "E";
  else if (lbl2.Text == "")
  { lbl2.Text = "E"; }
  else
     lbl3.Text = "E";
private void btnS_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "S";
  else if (lbl2.Text == "")
  { lbl2.Text = "S"; }
  else
     lb13.Text = "S";
private void btnU_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "U";
```

```
else if (lbl2.Text == "")
  { lbl2.Text = "U"; }
  else
     lb13.Text = "U";
private void btnO_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "O";
  else if (lbl2.Text == "")
  { lbl2.Text = "O"; }
  else
     lb13.Text = "O";
private void btnN_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "N";
  else if (lbl2.Text == "")
  { lbl2.Text = "N"; }
  else
     lb13.Text = "N";
private void btnF_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "F";
```

```
else if (lbl2.Text == "")
  { lbl2.Text = "F"; }
  else
    lbl3.Text = "F";
private void btnT_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "T";
  else if (lbl2.Text == "")
  { lbl2.Text = "T"; }
  else
    lb13.Text = "T";
private void button4_Click(object sender, EventArgs e)
  if (lbl1.Text == "S")
     if (lbl2.Text == "U")
       if (lbl3.Text == "N")
          MessageBox.Show("Hurrey!!! Correct!!!");
  else
          MessageBox.Show("Wrong");
private void btnNext_Click(object sender, EventArgs e)
  cross2 F = new cross2();
  F.ShowDialog();
```

### **Crossword Game Level 2:-**

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
namespace Final_Child__Learning_Games
  public partial class cross2: Form
    public cross2()
       InitializeComponent();
    private void btnA_Click(object sender, EventArgs e)
       if (lbl1.Text == "")
         lb11.Text = "A";
       else if (lbl2.Text == "")
       { lbl2.Text = "A"; }
       else if (lbl3.Text =="")
         lb13.Text = "A";
       else
         lbl4.Text = "A";
```

```
private void btnE_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "E";
  else if (lbl2.Text == "")
  { lbl2.Text = "E"; }
  else if (lbl3.Text == "")
     lbl3.Text = "E";
  else
     lbl4.Text = "E";
private void btnT_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "T";
  else if (lbl2.Text == "")
  { lbl2.Text = "T"; }
  else if (lbl3.Text == "")
     lb13.Text = "T";
  else
     lbl4.Text = "T";
private void button4_Click(object sender, EventArgs e)
  if (lbl1.Text == "S")
```

```
if (lbl2.Text == "O")
       if (lbl3.Text == "F")
          if(lbl4.Text == "T")
          MessageBox.Show("Hurrey!!! Correct!!!");
       else
          MessageBox.Show("Wrong");
}
private void btnClear_Click(object sender, EventArgs e)
  lbl1.Text = "";
  lbl2.Text = "";
  lbl3.Text = "";
  lbl4.Text = "";
private void btnF_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "F";
  else if (lbl2.Text == "")
  { lbl2.Text = "F"; }
  else if (lbl3.Text == "")
     lb13.Text = "F";
  else
    lbl4.Text = "F";
}
private void btnN_Click(object sender, EventArgs e)
```

```
if (lbl1.Text == "")
     lbl1.Text = "N";
  else if (lbl2.Text == "")
  { lbl2.Text = "N"; }
  else if (lbl3.Text == "")
     lbl3.Text = "N";
  else
     lbl4.Text = "N";
private void btnO_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "O";
  else if (lbl2.Text == "")
  { lbl2.Text = "O"; }
  else if (lbl3.Text == "")
     lbl3.Text = "O";
  else
     lbl4.Text = "O";
private void btnU_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "U";
```

```
else if (lbl2.Text == "")
  { lbl2.Text = "U"; }
  else if (lbl3.Text == "")
     lb13.Text = "U";
  else
     lb14.Text = "U";
}
private void btnS_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "S";
  else if (lbl2.Text == "")
  { lbl2.Text = "S"; }
  else if (lbl3.Text == "")
     lb13.Text = "S";
  else
     lbl4.Text = "S";
}
private void button9_Click(object sender, EventArgs e)
  Cross4 M= new Cross4();
  M.ShowDialog();
```

#### **Crossword Game Level 3:-**

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
namespace Final_Child__Learning_Games
  public partial class Cross4: Form
    public Cross4()
       InitializeComponent();
    private void btnA_Click(object sender, EventArgs e)
       if (lbl1.Text == "")
         lb11.Text = "A";
       else if (lbl2.Text == "")
       { lbl2.Text = "A"; }
       else if (lbl3.Text == "")
         lbl3.Text = "A";
       else
         lbl4.Text = "A";
```

```
private void btnE_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "E";
  else if (lbl2.Text == "")
  { lbl2.Text = "E"; }
  else if (lbl3.Text == "")
     lbl3.Text = "E";
  else
     lbl4.Text = "E";
private void btnS_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "S";
  else if (lbl2.Text == "")
  { lbl2.Text = "S"; }
  else if (lbl3.Text == "")
     lbl3.Text = "S";
  else
     lbl4.Text = "S";
private void btnU_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
```

```
lbl1.Text = "U";
  else if (lbl2.Text == "")
  { lbl2.Text = "U"; }
  else if (lbl3.Text == "")
     lb13.Text = "U";
  else
     lbl4.Text = "U";
private void btnO_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "O";
  else if (lbl2.Text == "")
  { lbl2.Text = "O"; }
  else if (lbl3.Text == "")
     lbl3.Text = "O";
  else
     lbl4.Text = "O";
private void btnN_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "N";
  else if (lbl2.Text == "")
  { lbl2.Text = "N"; }
```

```
else if (lbl3.Text == "")
     lb13.Text = "N";
  else
     lbl4.Text = "N";
private void btnF_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "F";
  else if (lbl2.Text == "")
  { lbl2.Text = "F"; }
  else if (lbl3.Text == "")
     lbl3.Text = "F";
  else
     lbl4.Text = "F";
private void btnT_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "T";
  else if (lbl2.Text == "")
  { lbl2.Text = "T"; }
  else if (lbl3.Text == "")
     lb13.Text = "T";
```

```
else
    lbl4.Text = "T";
private void btnAns_Click(object sender, EventArgs e)
  if (lbl1.Text == "N")
    if (lbl2.Text == "E")
       if (lbl3.Text == "S")
         if (lbl4.Text == "T")
            MessageBox.Show("Hurrey!!! Correct!!!");
         else
            MessageBox.Show("Wrong");
}
private void btnClear_Click(object sender, EventArgs e)
  lbl1.Text = "";
  lbl2.Text = "";
  lbl3.Text = "";
  lbl4.Text = "";
}
private void btnNext_Click(object sender, EventArgs e)
  Cross5 v= new Cross5();
  v.ShowDialog();
```

# **Crossword Game Level 4:-**

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Ling;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
namespace Final_Child__Learning_Games
  public partial class Cross5: Form
    public Cross5()
       InitializeComponent();
    private void btnA_Click(object sender, EventArgs e)
       if (lbl1.Text == "")
         lb11.Text = "A";
       else if (lbl2.Text == "")
       { lbl2.Text = "A"; }
       else if (lbl3.Text == "")
         lb13.Text = "A";
       else if(lbl4.Text == "")
         lbl4.Text = "A";
       else if (lbl5.Text == "")
```

```
{ lbl5.Text = "A";}
  else if (lbl6.Text =="")
  { lbl6.Text = "A"; }
  else if (lbl7.Text =="")
  { lbl7.Text = "A"; }
  else
     lbl8.Text = "A";
private void btnO_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "O";
  else if (lbl2.Text == "")
  { lbl2.Text = "O"; }
  else if (lbl3.Text == "")
     lbl3.Text = "O";
  else if (lbl4.Text == "")
     lbl4.Text = "O";
  else if (lbl5.Text == "")
  { lbl5.Text = "O"; }
  else if (lbl6.Text == "")
  { lbl6.Text = "O"; }
  else if (lbl7.Text == "")
  { lbl7.Text = "O"; }
  else
     lb18.Text = "O";
private void btnE_Click(object sender, EventArgs e)
```

```
if (lbl1.Text == "")
     lb11.Text = "E";
  else if (lbl2.Text == "")
  { lb12.Text = "E"; }
  else if (lbl3.Text == "")
     lbl3.Text = "E";
  else if (lbl4.Text == "")
     lbl4.Text = "E";
  else if (lbl5.Text == "")
  { lbl5.Text = "E"; }
  else if (lbl6.Text == "")
  { lbl6.Text = "E"; }
  else if (lbl7.Text == "")
  { lbl7.Text = "E"; }
  else
     lb18.Text = "E";
private void btnN_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "N";
  else if (lbl2.Text == "")
  { lbl2.Text = "N"; }
  else if (lbl3.Text == "")
     lbl3.Text = "N";
  else if (lbl4.Text == "")
```

```
lbl4.Text = "N";
  else if (lbl5.Text == "")
  { lbl5.Text = "N"; }
  else if (lbl6.Text == "")
  { lbl6.Text = "N"; }
  else if (lbl7.Text == "")
  { lbl7.Text = "N"; }
  else
     lbl8.Text = "N";
private void btnS_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "S";
  else if (lbl2.Text == "")
  { lbl2.Text = "A"; }
  else if (lbl3.Text == "")
     lbl3.Text = "S";
  else if (lbl4.Text == "")
     lbl4.Text = "S";
  else if (lbl5.Text == "")
  { lbl5.Text = "S"; }
  else if (lbl6.Text == "")
  { lbl6.Text = "S"; }
  else if (lbl7.Text == "")
  { lbl7.Text = "S"; }
  else
     lbl8.Text = "S";
```

```
private void btnF_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "F";
  else if (lbl2.Text == "")
  { lbl2.Text = "F"; }
  else if (lbl3.Text == "")
     lb13.Text = "F";
  else if (lbl4.Text == "")
     lbl4.Text = "F";
  else if (lbl5.Text == "")
  { lbl5.Text = "F"; }
  else if (lbl6.Text == "")
  { lbl6.Text = "F"; }
  else if (lbl7.Text == "")
  { lbl7.Text = "F"; }
  else
     lb18.Text = "F";
private void btnU_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "U";
  else if (1b12.Text == "")
  { lbl2.Text = "U"; }
  else if (lbl3.Text == "")
```

```
lb13.Text = "U";
  else if (lbl4.Text == "")
     lb14.Text = "U";
  else if (lbl5.Text == "")
  { lbl5.Text = "U"; }
  else if (lbl6.Text == "")
  { lbl6.Text = "U"; }
  else if (lbl7.Text == "")
  { lbl7.Text = "U"; }
  else
     lb18.Text = "U";
private void btnT_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "T";
  else if (lbl2.Text == "")
  { lbl2.Text = "T"; }
  else if (lbl3.Text == "")
     lb13.Text = "T";
  else if (lbl4.Text == "")
     lbl4.Text = "T";
  else if (lbl5.Text == "")
  { lbl5.Text = "T"; }
  else if (lbl6.Text == "")
  { lbl6.Text = "T"; }
  else if (lbl7.Text == "")
```

```
{ lbl7.Text = "T"; }
  else
     lb18.Text = "T";
private void btnC_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "C";
  else if (lbl2.Text == "")
  { lbl2.Text = "C"; }
  else if (lbl3.Text == "")
     lb13.Text = "C";
  else if (lbl4.Text == "")
     lbl4.Text = "C";
  else if (lbl5.Text == "")
  { lbl5.Text = "C"; }
  else if (lbl6.Text == "")
  { lbl6.Text = "C"; }
  else if (lbl7.Text == "")
  { lbl7.Text = "C"; }
  else
     lb18.Text = "C";
private void btnV_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "V";
```

```
else if (lbl2.Text == "")
  { lb12.Text = "V"; }
  else if (lbl3.Text == "")
     lb13.Text = "V";
  else if (lbl4.Text == "")
     lbl4.Text = "V";
  else if (lbl5.Text == "")
  { lbl5.Text = "V"; }
  else if (lbl6.Text == "")
  { lbl6.Text = "V"; }
  else if (lbl7.Text == "")
  { lbl7.Text = "V"; }
  else
     lb18.Text = "V";
private void btnI_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "I";
  else if (lbl2.Text == "")
  { lbl2.Text = "I"; }
  else if (lbl3.Text == "")
     lbl3.Text = "I";
  else if (lbl4.Text == "")
     lbl4.Text = "I";
  else if (lbl5.Text == "")
```

```
{ lbl5.Text = "I"; }
  else if (lbl6.Text == "")
  { lbl6.Text = "I"; }
  else if (lbl7.Text == "")
  { lbl7.Text = "I"; }
  else
     lbl8.Text = "I";
private void btnL_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "L";
  else if (lbl2.Text == "")
  { lb12.Text = "L"; }
  else if (lbl3.Text == "")
     lbl3.Text = "L";
  else if (lbl4.Text == "")
     lbl4.Text = "L";
  else if (lbl5.Text == "")
  { lbl5.Text = "L"; }
  else if (lbl6.Text == "")
  { lbl6.Text = "L"; }
  else if (lbl7.Text == "")
  { lbl7.Text = "L"; }
  else
     lb18.Text = "L";
private void btnAns_Click(object sender, EventArgs e)
```

```
if (lbl1.Text == "F")
     if (lbl2.Text == "E")
       if (lbl3.Text == "S")
          if (lbl4.Text == "T")
            if (lbl5.Text == "I")
               if (lbl6.Text == "V")
                 if (lb17.Text == "A")
                    if (lbl8.Text == "L")
                         MessageBox.Show("Hurrey!!! Correct!!!");
                       else
                              MessageBox.Show("Wrong");
}
private void btnClear_Click(object sender, EventArgs e)
  lbl1.Text = "";
  lbl2.Text = "";
  lb13.Text = "":
  lbl4.Text = "":
  lbl5.Text = ""
  lbl6.Text = "";
  lbl7.Text = "";
  lb18.Text = "";
private void btnNext_Click(object sender, EventArgs e)
  cross7 l= new cross7();
  1.ShowDialog();
```

#### **Crossword Game Level 5:-**

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Ling;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
namespace Final_Child__Learning_Games
  public partial class Cross6: Form
    public Cross6()
       InitializeComponent();
    private void btnA_Click(object sender, EventArgs e)
       if (lbl1.Text == "")
         lbl1.Text = "A";
       else if (lbl2.Text == "")
       { lbl2.Text = "A"; }
       else if (lbl3.Text == "")
         lb13.Text = "A";
       else if (lbl4.Text =="")
         lb14.Text = "A";
```

```
else
     lbl5.Text = "A";
private void btnO_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "O";
  else if (lbl2.Text == "")
  { lbl2.Text = "O"; }
  else if (lbl3.Text == "")
     lb13.Text = "O";
  else if (lbl4.Text == "")
     lbl4.Text = "O";
  else
     lbl5.Text = "O";
private void btnE_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "E";
  else if (lbl2.Text == "")
  { lbl2.Text = "E"; }
  else if (lbl3.Text == "")
     lbl3.Text = "E";
  else if (lbl4.Text == "")
```

```
lbl4.Text = "E";
  else
     lbl5.Text = "E";
private void btnN_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "N";
  else if (lbl2.Text == "")
  { lbl2.Text = "N"; }
  else if (lbl3.Text == "")
     lb13.Text = "N";
  else if (lbl4.Text == "")
     lbl4.Text = "N";
  else
     lb15.Text = "N";
private void btnS_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "S";
  else if (lbl2.Text == "")
  { lbl2.Text = "S"; }
  else if (lbl3.Text == "")
     lbl3.Text = "S";
```

```
else if (lbl4.Text == "")
     lbl4.Text = "S";
  else
     lbl5.Text = "S";
private void btnF_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "F";
  else if (lbl2.Text == "")
  { lbl2.Text = "F"; }
  else if (lbl3.Text == "")
     lbl3.Text = "F";
  else if (lbl4.Text == "")
     lbl4.Text = "F";
  else
     lbl5.Text = "F";
private void btnI_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "I";
  else if (lbl2.Text == "")
  { lbl2.Text = "I"; }
```

# **Crossword Game 6:-**

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Ling;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
namespace Final_Child__Learning_Games
  public partial class cross7: Form
    public cross7()
       InitializeComponent();
    private void btnA_Click(object sender, EventArgs e)
       if (lbl1.Text == "")
         lb11.Text = "A";
       else if (lbl2.Text == "")
       { lbl2.Text = "A"; }
       else if (lbl3.Text == "")
         lbl3.Text = "A";
       else if (lbl4.Text == "")
```

```
lbl4.Text = "A";
  else
     lbl5.Text = "A";
}
private void btnO_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lb11.Text = "O";
  else if (lbl2.Text == "")
  { lbl2.Text = "O"; }
  else if (lbl3.Text == "")
     lb13.Text = "O";
  else if (lbl4.Text == "")
     lbl4.Text = "O";
  else
     lbl5.Text = "O";
private void btnE_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "E";
  else if (lbl2.Text == "")
  { lbl2.Text = "E"; }
```

```
else if (lbl3.Text == "")
     lbl3.Text = "E";
  else if (lbl4.Text == "")
     lbl4.Text = "E";
  else
     lbl5.Text = "E";
private void btnN_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "N";
  else if (lbl2.Text == "")
  { lb12.Text = "N"; }
  else if (lbl3.Text == "")
     lb13.Text = "N";
  else if (lbl4.Text == "")
     lbl4.Text = "N";
  else
     lbl5.Text = "N";
private void btnD_Click(object sender, EventArgs e)
```

```
if (lbl1.Text == "")
     lbl1.Text = "D";
  else if (lbl2.Text == "")
  { lbl2.Text = "D"; }
  else if (lbl3.Text == "")
     lb13.Text = "D";
  else if (lbl4.Text == "")
     lbl4.Text = "D";
  else
     lbl5.Text = "D";
private void btnF_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "F";
  else if (lbl2.Text == "")
  { lbl2.Text = "F"; }
  else if (lbl3.Text == "")
     lbl3.Text = "F";
  else if (lbl4.Text == "")
     lbl4.Text = "F";
  else
     lbl5.Text = "F";
```

```
private void btnI_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "I";
  else if (lbl2.Text == "")
  { lb12.Text = "I"; }
  else if (lbl3.Text == "")
     lb13.Text = "I";
  else if (lbl4.Text == "")
     lbl4.Text = "I";
  else
     lbl5.Text = "I";
private void btnT_Click(object sender, EventArgs e)
  if (lbl1.Text == "")
     lbl1.Text = "T";
  else if (lbl2.Text == "")
  { lbl2.Text = "T"; }
  else if (lbl3.Text == "")
     lb13.Text = "T";
  else if (lbl4.Text == "")
```

```
lbl4.Text = "T";
  else
     lbl5.Text = "T";
private void btnAns_Click(object sender, EventArgs e)
  cross8 p = new cross8();
  p.ShowDialog();
private void btnClear_Click(object sender, EventArgs e)
  lbl1.Text = "";
  lbl2.Text = "";
  lbl3.Text = "";
  lbl4.Text = "";
  lbl5.Text = "";
private void btnNext_Click(object sender, EventArgs e)
```

# **NUMBER GAME -**

#### **Number Game Level 1:-**

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Ling;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
namespace Final_Child__Learning_Games
  public partial class Num_1 : Form
    public Num_1()
      InitializeComponent();
    private void label10_Click(object sender, EventArgs e)
    private void button1_Click(object sender, EventArgs e)
      if(this.textBox1.Text == "2" && this.textBox2.Text == "30" &&
this.textBox3.Text == "560")
         MessageBox.Show("Hurrey!!!!! your ans is correct");
      else
         MessageBox.Show("Wrong!!");
```

```
}

private void button2_Click(object sender, EventArgs e)
{
    Num_2 N2= new Num_2();
    N2.ShowDialog ();
}

private void Num_1_Load(object sender, EventArgs e)
{
    }
}
```

# Number Game level 2:-

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
namespace Final_Child__Learning_Games
  public partial class Num_2 : Form
    public Num_2()
       InitializeComponent();
    private void button1_Click(object sender, EventArgs e)
       if (this.textBox1.Text == "2" && this.textBox2.Text == "11" &&
this.textBox3.Text == "179")
         MessageBox.Show("Hurrey!!!!! your ans is correct");
       else
         MessageBox.Show("Wrong!!");
    private void Num_2_Load(object sender, EventArgs e)
```

```
private void button2_Click(object sender, EventArgs e)
{
    Num_3 N3 = new Num_3();
    N3.ShowDialog ();
}
}
```

### **Number Game Level 3:-**

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Ling;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
namespace Final_Child__Learning_Games
  public partial class Num_3 : Form
    public Num_3()
       InitializeComponent();
    private void button1_Click(object sender, EventArgs e)
       if (this.textBox1.Text == "30" && this.textBox2.Text == "200" &&
this.textBox3.Text == "15")
         MessageBox.Show("Hurrey!!!!! your ans is correct");
       else
         MessageBox.Show("Wrong!!");
    private void button2_Click(object sender, EventArgs e)
       Num_4 num_4= new Num_4();
       num_4.ShowDialog();
```

# **Number Game Level 4:-**

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
namespace Final_Child__Learning_Games
  public partial class Num_4 : Form
    public Num_4()
       InitializeComponent();
    private void button1_Click(object sender, EventArgs e)
       if (this.textBox1.Text == "9" && this.textBox2.Text == "16" &&
this.textBox3.Text == "44")
         MessageBox.Show("Hurrey!!!!! your ans is correct");
       else
         MessageBox.Show("Wrong!!");
```

#### Puzzle Game :-

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Ling;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
namespace Final_Child__Learning_Games
  public partial class Puzzle: Form
    public Puzzle()
       InitializeComponent();
    int movesNumber = 0, labelIndex=0;
       private void ShuffleButtons()
       List<int> LabelList = new List<int>();
       Random rand= new Random();
       foreach (Button btn in this.pnl.Controls)
         while (LabelList.Contains (labelIndex ))
            labelIndex=rand.Next (16);
         btn.Text = (labelIndex == 0)? "": labelIndex + "";
         btn.BackColor = (btn.Text == "") ? Color.White :
Color.FromKnownColor(KnownColor.ControlLight);
         LabelList.Add (labelIndex);
       movesNumber = 0;
       lblNoOfMoves.Text = "Number of moves : " + movesNumber;
```

```
private void Swaplable(object sender, EventArgs e)
       Button btn =(Button)sender;
       if (btn.Text == "")
         return;
       Button whitebtn = null;
       foreach(Button bt in this.pnl.Controls)
         if (bt.Text=="")
           whitebtn= bt;
           break;
       if(btn.TabIndex==(whitebtn.TabIndex-1)||
         btn.TabIndex==(whitebtn.TabIndex-4)||
         btn.TabIndex == (whitebtn.TabIndex + 1)||
         btn.TabIndex==(whitebtn.TabIndex+4))
whitebtn.BackColor=Color.FromKnownColor(KnownColor.ControlLight);
         btn.BackColor = Color.White;
         whitebtn.Text= btn.Text;
         btn.Text = "";
         movesNumber++;
         lblNoOfMoves.Text="Number of Moves: "+ movesNumber;
       CkeckOrder();
    private void CkeckOrder()
       int index = 0;
       foreach(Button btn in this.pnl.Controls)
```

```
if (btn.Text!=""&& Convert.ToInt16(btn.Text)!=index)
{
    return;
}
index++;
}
MessageBox.Show("Congrats ! You did it in " +
movesNumber+"Moves");
}

private void btnNewGame_Click(object sender, EventArgs e)
{
    ShuffleButtons();
}

private void Puzzle_Load(object sender, EventArgs e)
{
    ShuffleButtons();
}
```

#### **ENGLISH GAME –**

# **Alphabet Game Level 1:**using System; using System.Collections.Generic; using System.ComponentModel; using System.Data; using System.Drawing; using System.Ling; using System.Text; using System. Threading. Tasks; using System. Windows. Forms; namespace Final\_Child\_\_Learning\_Games public partial class AlphabetGame\_lvl1 : Form // quiz game variables int correctAnswer; int questionNumber = 1;int score; int percentage; int totalQuestions; public AlphabetGame\_lvl1() InitializeComponent(); askQuestion(questionNumber); totalQuestions = 13;private void checkAnswerEvent(object sender, EventArgs e) var senderObject = (Button)sender; int buttonTag = Convert.ToInt32(senderObject.Tag); if (buttonTag == correctAnswer)

```
score++;
       if (questionNumber == totalQuestions)
         // working out the score
         MessageBox.Show(
           "Quiz Ended!!! " + Environment.NewLine +
           "You Score " + score + " questions correctly. " +
Environment. New Line +\\
           "Click OK to play again!");
         score = 0;
         questionNumber = 0;
         askQuestion(questionNumber);
       questionNumber++;
       askQuestion(questionNumber);
    private void askQuestion(int qnum)
       switch (qnum)
         case 1:
           pictureBox2.Image = Properties.Resources.apple;
           lblQuestions.Text = "A for ?";
           button1.Text = "Banana";
           button2.Text = "Apple";
           button3.Text = "Orange";
           button4.Text = "Cat";
```

```
correctAnswer = 2;
  break;
case 2:
  pictureBox2.Image = Properties.Resources.apple;
  lblQuestions.Text = "B for ?";
  button1.Text = "Banana";
  button2.Text = "Apple";
  button3.Text = "Orange";
  button4.Text = "Cat";
  correctAnswer = 1;
  break;
case 3:
  pictureBox2.Image = Properties.Resources.cat2;
  lblQuestions.Text = "C for ?";
  button1.Text = "Banana";
  button2.Text = "Apple";
  button3.Text = "Orange";
  button4.Text = "Cat";
  correctAnswer = 4;
  break;
case 4:
  pictureBox2.Image = Properties.Resources.dog;
```

```
lblQuestions.Text = "D for ?";
  button1.Text = "Kite";
  button2.Text = "Apple";
  button3.Text = "Dog";
  button4.Text = "Banana";
  correctAnswer = 3;
  break;
case 5:
  pictureBox2.Image = Properties.Resources.elephant;
  lblQuestions.Text = "E for ?";
  button1.Text = "Elephant";
  button2.Text = "Fan";
  button3.Text = "Grapes";
  button4.Text = "Frog";
  correctAnswer = 1;
  break;
case 6:
  pictureBox2.Image = Properties.Resources.frog;
  lblQuestions.Text = "F for ?";
  button1.Text = "Hen";
  button2.Text = "Frog";
  button3.Text = "Zebra";
  button4.Text = "Cat";
```

```
correctAnswer = 2;
  break;
case 7:
  pictureBox2.Image = Properties.Resources.giraffe;
  lblQuestions.Text = "G for ?";
  button1.Text = "Giraffe";
  button2.Text = "Ice Cream";
  button3.Text = "Hen";
  button4.Text = "Joker";
  correctAnswer = 1;
  break;
case 8:
  pictureBox2.Image = Properties.Resources.hen;
  lblQuestions.Text = "H for ?";
  button1.Text = "Grapes";
  button2.Text = "Joker";
  button3.Text = "Hen";
  button4.Text = "Ice Cream";
  correctAnswer = 3;
  break;
case 9:
  pictureBox2.Image = Properties.Resources.ice_cream;
```

```
lblQuestions.Text = "I for ?";
  button1.Text = "Hen";
  button2.Text = "Joker";
  button3.Text = "Kite";
  button4.Text = "Ice Cream";
  correctAnswer = 4;
  break;
case 10:
  pictureBox2.Image = Properties.Resources.joker;
  lblQuestions.Text = "J for ?";
  button1.Text = "Joker";
  button2.Text = "Apple";
  button3.Text = "Dog";
  button4.Text = "Banana";
  correctAnswer = 1;
  break;
case 11:
  pictureBox2.Image = Properties.Resources.kite;
  lblQuestions.Text = "K for ?";
  button1.Text = "Elephant";
  button2.Text = "Kite";
  button3.Text = "Grapes";
  button4.Text = "Frog";
```

```
break;
case 12:
  pictureBox2.Image = Properties.Resources.lion;
  lblQuestions.Text = "L for ?";
  button1.Text = "Orange";
  button2.Text = "Lion";
  button3.Text = "Dog";
  button4.Text = "Apple";
  correctAnswer = 2;
  break;
case 13:
  pictureBox2.Image = Properties.Resources.monkey;
  lblQuestions.Text = "M for ?";
  button1.Text = "Orange";
  button2.Text = "Monkey";
  button3.Text = "Dog";
  button4.Text = "Apple";
  correctAnswer = 2;
  break;
```

correctAnswer = 2;

### **Alphabet Game Level 2:-**

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Ling;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
namespace Final_Child__Learning_Games
  public partial class AlphabetGame_lvl2 : Form
    // quiz game variables
    int correctAnswer;
    int questionNumber = 1;
    int score;
    int percentage;
    int totalQuestions;
    public AlphabetGame_lvl2()
       InitializeComponent();
       askQuestion(questionNumber);
       totalQuestions = 10;
    private void checkAnswerEvent(object sender, EventArgs e)
       var senderObject = (Button)sender;
       int buttonTag = Convert.ToInt32(senderObject.Tag);
       if (buttonTag == correctAnswer)
```

```
score++;
       if (questionNumber == totalQuestions)
         // working out the score
         MessageBox.Show(
           "Quiz Ended!!! " + Environment.NewLine +
           "You Score " + score + " questions correctly. " +
Environment. New Line +\\
           "Click OK to play again!");
         score = 0;
         questionNumber = 0;
         askQuestion(questionNumber);
       questionNumber++;
       askQuestion(questionNumber);
    private void askQuestion(int qnum)
       switch (qnum)
         case 1:
           pictureBox2.Image = Properties.Resources.nest;
           lblQuestions.Text = "N for ?";
           button1.Text = "Banana";
           button2.Text = "Apple";
           button3.Text = "Nest";
           button4.Text = "Cat";
```

```
correctAnswer = 3;
  break;
case 2:
  pictureBox2.Image = Properties.Resources.orange;
  lblQuestions.Text = "O for ?";
  button1.Text = "Banana";
  button2.Text = "Apple";
  button3.Text = "Orange";
  button4.Text = "Cat";
  correctAnswer = 1;
  break;
case 3:
  pictureBox2.Image = Properties.Resources.peacock;
  lblQuestions.Text = "P for ?";
  button1.Text = "Peacock";
  button2.Text = "Apple";
  button3.Text = "Orange";
  button4.Text = "Cat";
  correctAnswer = 1;
  break;
case 4:
  pictureBox2.Image = Properties.Resources.queen;
```

```
lblQuestions.Text = "Q for ?";
  button1.Text = "Kite";
  button2.Text = "Queen";
  button3.Text = "Dog";
  button4.Text = "Banana";
  correctAnswer = 2;
  break;
case 5:
  pictureBox2.Image = Properties.Resources.rat;
  lblQuestions.Text = "R for ?";
  button1.Text = "Rat";
  button2.Text = "Fan";
  button3.Text = "Grapes";
  button4.Text = "Frog";
  correctAnswer = 1;
  break;
case 6:
  pictureBox2.Image = Properties.Resources.snake;
  lblQuestions.Text = "S for ?";
  button1.Text = "Hen";
  button2.Text = "Frog";
  button3.Text = "Zebra";
  button4.Text = "Snake";
```

```
correctAnswer = 4;
  break;
case 7:
  pictureBox2.Image = Properties.Resources.tree;
  lblQuestions.Text = "T for ?";
  button1.Text = "Giraffe";
  button2.Text = "Tree";
  button3.Text = "Hen";
  button4.Text = "Joker";
  correctAnswer = 2;
  break;
case 8:
  pictureBox2.Image = Properties.Resources.umbrella;
  lblQuestions.Text = "U for ?";
  button1.Text = "Rain";
  button2.Text = "Joker";
  button3.Text = "Umbbrella";
  button4.Text = "Ice Cream";
  correctAnswer = 3;
  break;
case 9:
  pictureBox2.Image = Properties.Resources.van;
```

```
lblQuestions.Text = "V for ?";
  button1.Text = "Hen";
  button2.Text = "Joker";
  button3.Text = "Kite";
  button4.Text = "Van";
  correctAnswer = 4;
  break;
case 10:
  pictureBox2.Image = Properties.Resources.watch;
  lblQuestions.Text = "W for ?";
  button1.Text = "Joker";
  button2.Text = "Watch";
  button3.Text = "Dog";
  button4.Text = "Banana";
  correctAnswer = 2;
  break;
case 11:
  pictureBox2.Image = Properties.Resources.xmas;
  lblQuestions.Text = "K for ?";
  button1.Text = "Elephant";
  button2.Text = "Kite";
  button3.Text = "Grapes";
  button4.Text = "Frog";
```

```
correctAnswer = 2;
  break;
case 12:
  picture Box 2. Image = Properties. Resources. yak; \\
  lblQuestions.Text = "Y for ?";
  button1.Text = "Yak";
  button2.Text = "Leg";
  button3.Text = "Dog";
  button4.Text = "Apple";
  correctAnswer = 1;
  break;
case 13:
  pictureBox2.Image = Properties.Resources.zebra;
  lblQuestions.Text = "Z for ?";
  button1.Text = "Orange";
  button2.Text = "Monkey";
  button3.Text = "Dog";
  button4.Text = "Zebra";
  correctAnswer = 4;
  break;
```

#### **Consonants and Vowels Game:-**

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Ling;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
namespace Final_Child__Learning_Games
  public partial class consonantsvowels: Form
    // quiz game variables
    int correctAnswer;
    int questionNumber = 1;
    int score;
    int percentage;
    int totalQuestions;
    public consonantsvowels()
       InitializeComponent();
       askQuestion(questionNumber);
       totalQuestions = 10;
    private void checkAnswerEvent(object sender, EventArgs e)
       var senderObject = (Button)sender;
       int buttonTag = Convert.ToInt32(senderObject.Tag);
       if (buttonTag == correctAnswer)
```

```
score++;
      if (questionNumber == totalQuestions)
         // working out the score
         MessageBox.Show(
                           " + Environment.NewLine +
           "Quiz Ended!!!
           "You Score " + score + " questions correctly. " +
Environment.NewLine +
           "Click OK to play again!");
         score = 0;
         questionNumber = 0;
         askQuestion(questionNumber);
      questionNumber++;
      askQuestion(questionNumber);
    private void askQuestion(int qnum)
      switch (qnum)
         case 1:
           pictureBox2.Image = Properties.Resources.img1;
           lblQuestions.Text = "Identitify the Vowel";
           button1.Text = "W";
           button2.Text = "A";
           button3.Text = "R";
           button4.Text = "Y";
```

```
correctAnswer = 2;
  break;
case 2:
  pictureBox2.Image = Properties.Resources.img2;
  lblQuestions.Text = "Identitify the Vowel";
  button1.Text = "C";
  button2.Text = "T";
  button3.Text = "S";
  button4.Text = "E";
  correctAnswer = 4;
  break;
case 3:
  pictureBox2.Image = Properties.Resources.img3;
  lblQuestions.Text = "Identitify the Vowel";
  button1.Text = "M";
  button2.Text = "U";
  button3.Text = "K";
  button4.Text = "Y";
  correctAnswer = 2;
  break;
case 4:
  pictureBox2.Image = Properties.Resources.img4;
```

```
lblQuestions.Text = "Identitify the Vowel";
  button1.Text = "F";
  button2.Text = "R";
  button3.Text = "O";
  button4.Text = "W";
  correctAnswer = 3;
  break;
case 5:
  pictureBox2.Image = Properties.Resources.img5;
  lblQuestions.Text = "Identitify the Vowel";
  button1.Text = "S";
  button2.Text = "B";
  button3.Text = "E";
  button4.Text = "I";
  correctAnswer = 4;
  break;
case 6:
  pictureBox2.Image = Properties.Resources.img6;
  lblQuestions.Text = "Identitify the Consonant";
  button1.Text = "E";
  button2.Text = "I";
  button3.Text = "A";
  button4.Text = "Y";
```

```
correctAnswer = 4;
  break;
case 7:
  pictureBox2.Image = Properties.Resources.img7;
  lblQuestions.Text = "Identitify the Consonant";
  button1.Text = "C";
  button2.Text = "A";
  button3.Text = "U";
  button4.Text = "E";
  correctAnswer = 1;
  break;
case 8:
  pictureBox2.Image = Properties.Resources.img8;
  lblQuestions.Text = "Identitify the Consonant";
  button1.Text = "O";
  button2.Text = "U";
  button3.Text = "K";
  button4.Text = "I";
  correctAnswer = 3;
  break;
case 9:
  pictureBox2.Image = Properties.Resources.img9;
```

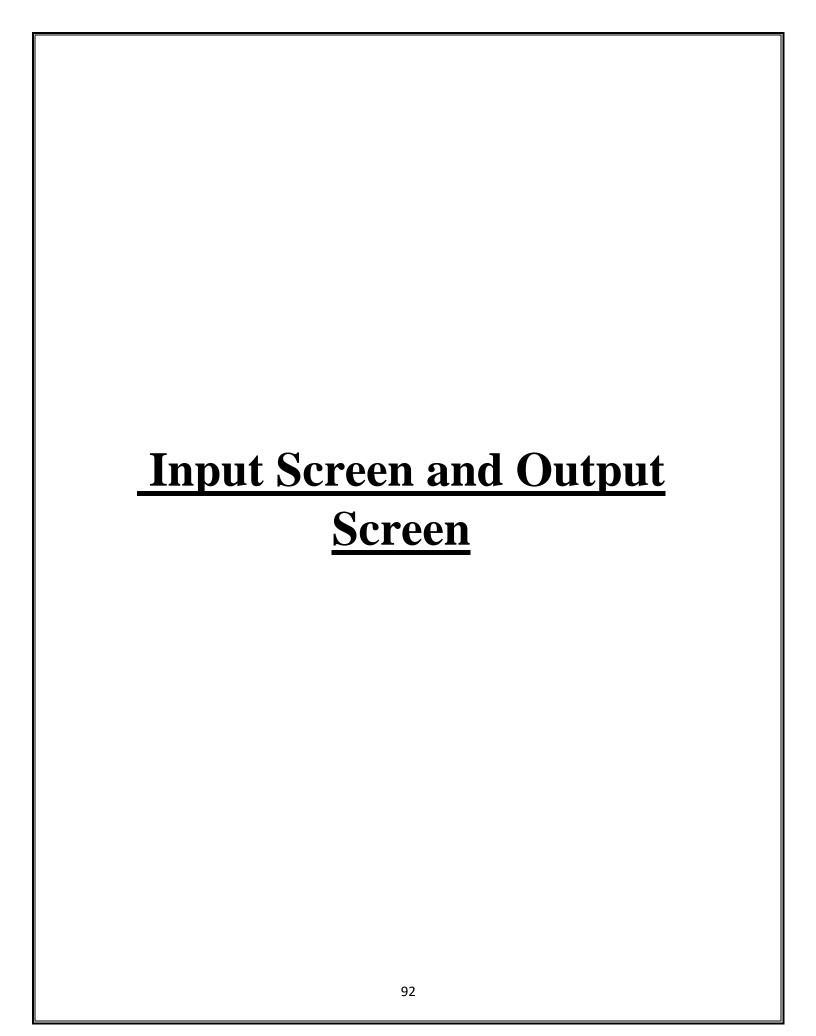
```
lblQuestions.Text = "Identitify the Consonant";
  button1.Text = "F";
  button2.Text = "U";
  button3.Text = "O";
  button4.Text = "I";
  correctAnswer = 1;
  break;
case 10:
  pictureBox2.Image = Properties.Resources.img10;
  lblQuestions.Text = "Identitify the Consonant";
  button1.Text = "S";
  button2.Text = "A";
  button3.Text = "E";
  button4.Text = "I";
  correctAnswer = 1;
  break;
```

## **Memory Game:-**

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Ling;
using System.Text;
using System. Threading. Tasks;
using System. Windows. Forms;
using static
System. Windows. Forms. Visual Styles. Visual Style Element. Progress Bar;
namespace Final_Child__Learning_Games
  public partial class memory_game : Form
     Random random = new Random();
     List<string> icons = new List<string>()
       "!","!", "N", "N",",",",","k", "k",
       "b","b", "v", "v", "w", "w", "z ", "z"
       };
     Label firstClicked, secondClicked;
     public memory_game()
       InitializeComponent();
       AssignIconsToSquares();
     private void label_Click(object sender, EventArgs e)
       if (firstClicked != null && secondClicked != null)
```

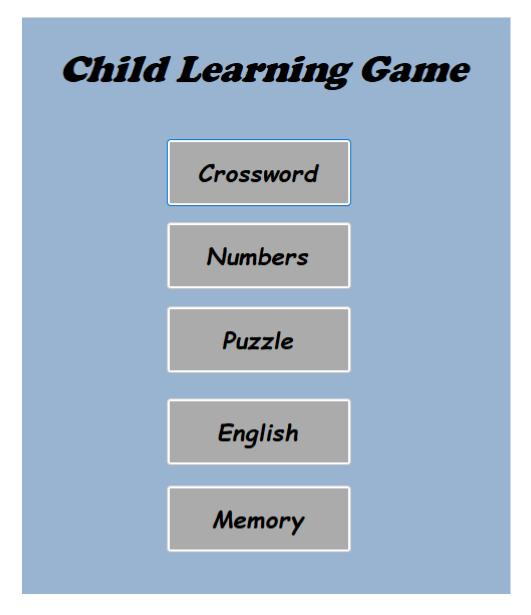
```
return;
  Label clickedLabel = sender as Label;
  if (clickedLabel == null)
     return;
  if (clickedLabel.ForeColor == Color.Black)
     return;
  if (firstClicked == null)
     firstClicked = clickedLabel;
    firstClicked.ForeColor = Color.Black;
     return;
  }
  secondClicked = clickedLabel;
  secondClicked.ForeColor = Color.Black;
  checkForWinner ();
  if (firstClicked.Text == secondClicked.Text)
    firstClicked = null;
     secondClicked = null;
  else
  timer1.Start();
private void checkForWinner()
  Label label;
  for (int i = 0; i < tableLayoutPanel1.Controls.Count; <math>i++)
     label = tableLayoutPanel1.Controls[i] as Label;
    if (label1 != null && label.ForeColor == label.BackColor)
       return;
```

```
MessageBox.Show("You matched all the icons! Congrats!");
  Close();
private void timer1_Tick(object sender, EventArgs e)
  timer1.Stop();
  firstClicked.ForeColor = firstClicked.BackColor;
  secondClicked.ForeColor = secondClicked.BackColor;
  firstClicked = null;
  secondClicked = null;
}
private void AssignIconsToSquares()
  Label label;
  int randomNumber;
  for (int i = 0; i < tableLayoutPanel1.Controls.Count; i++)
    if (tableLayoutPanel1.Controls[i] is Label)
      label = (Label)tableLayoutPanel1.Controls[i];
    else
       continue;
    randomNumber = random.Next(0, icons.Count);
    label.Text = icons[randomNumber];
    icons.RemoveAt(randomNumber);
```

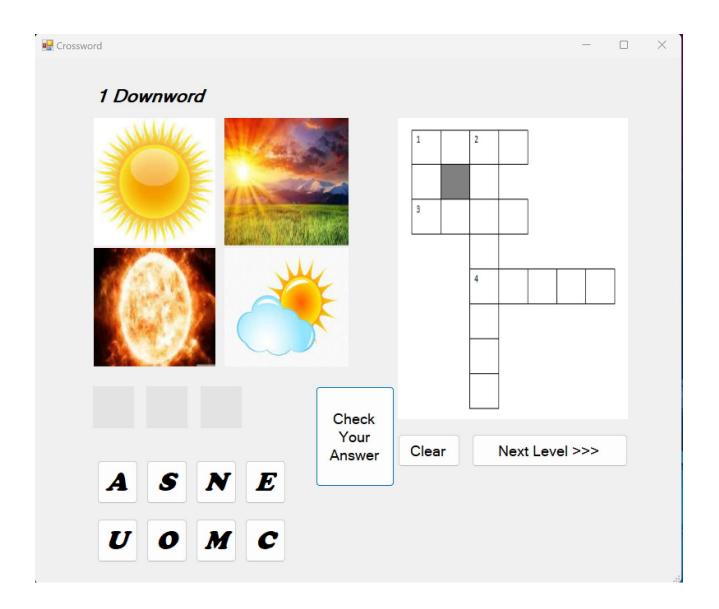


## **CHILD LEARNING GAME:-**

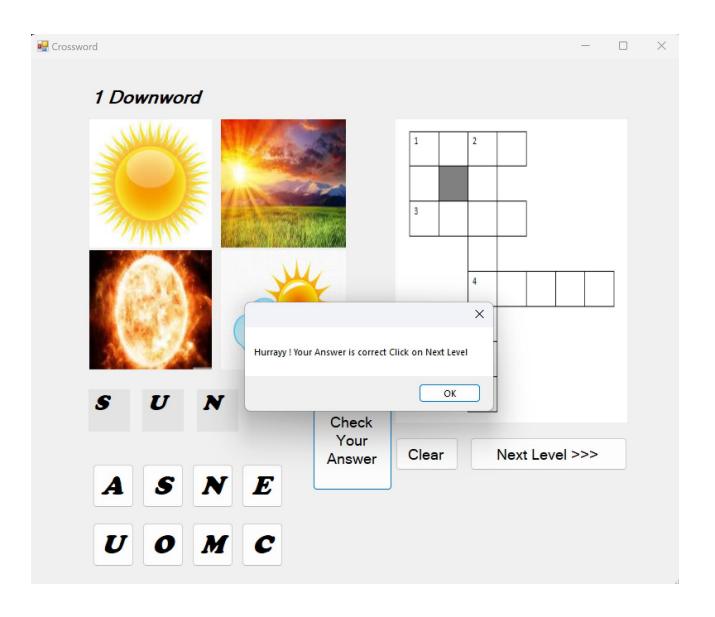
• Chilarning Game Home Page –



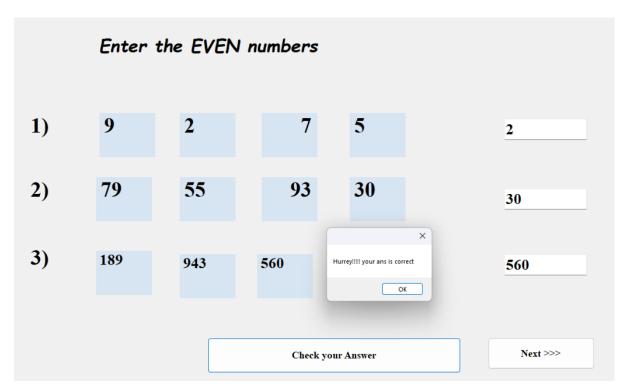
• Crossword Game Screen –

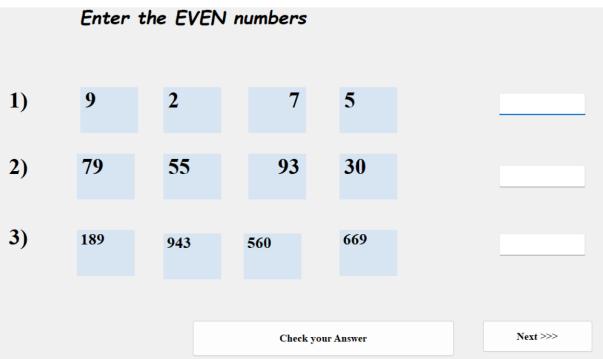


• Crossword Game Screen –

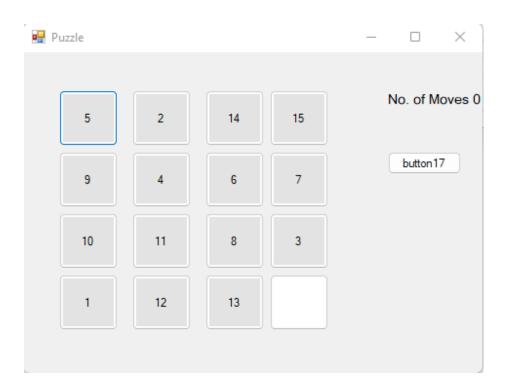


### • Number Game –





• Puzzle Game Screen -



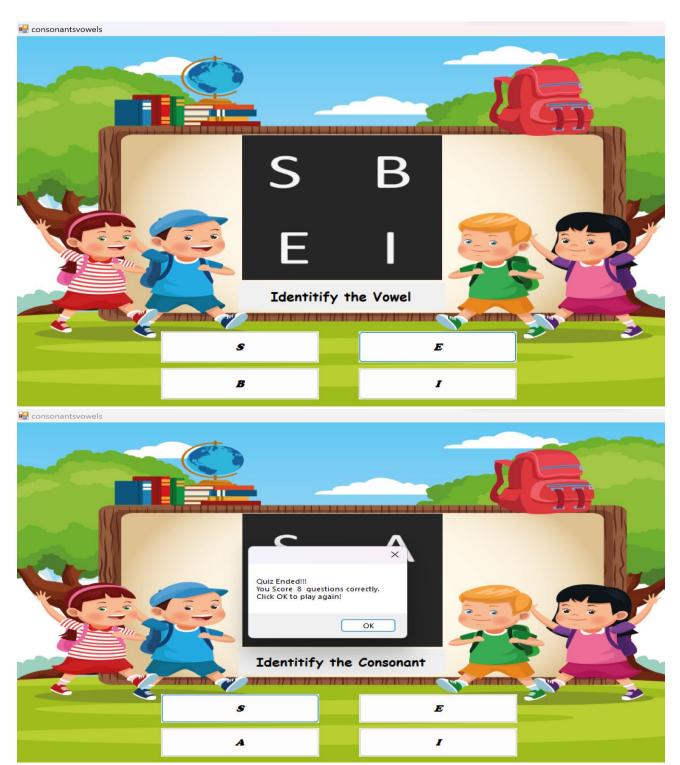
• Alphabet Game Screen -



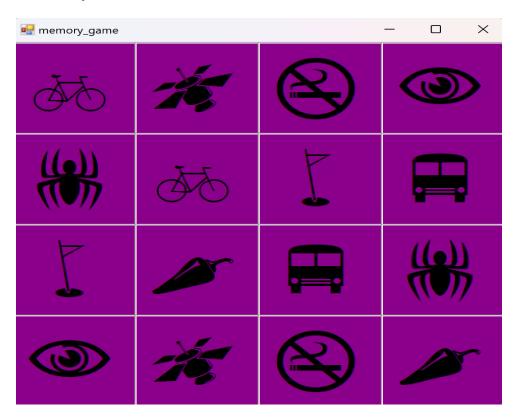


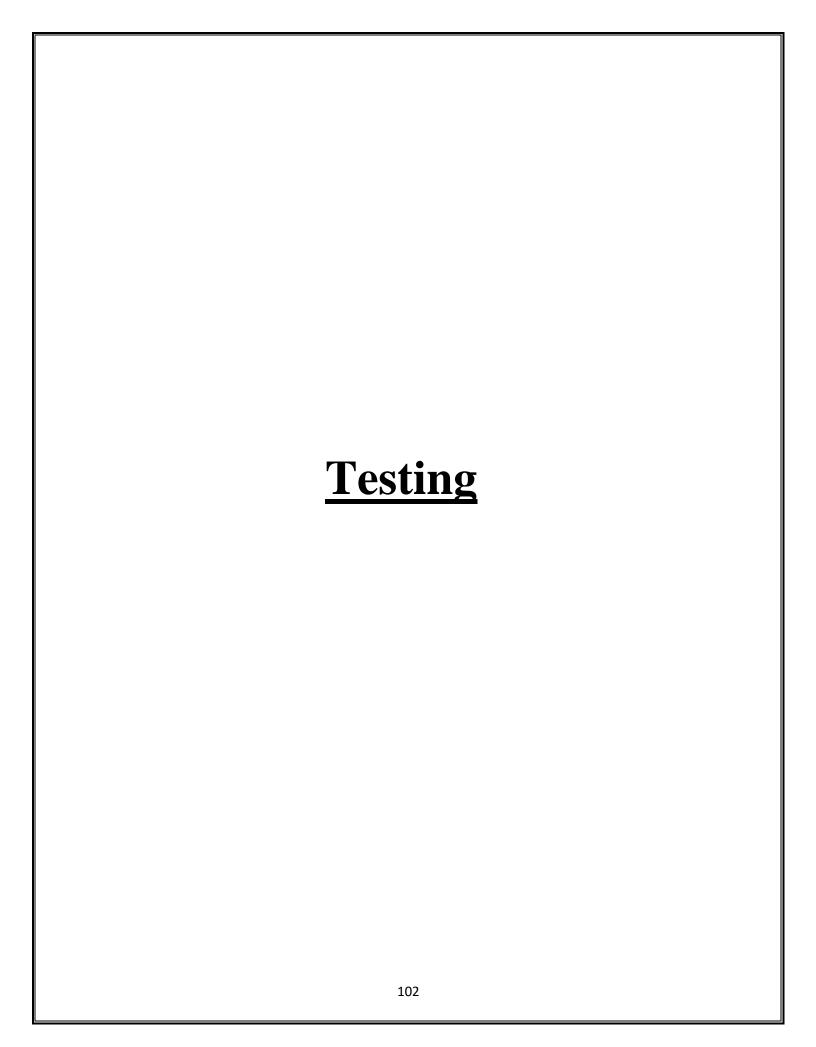


## • Consonants and Vowels Game Screen :-



# • Memory Game :-





### **Testing**

Testing plays important role to identify the quality of any software. Testing actually refers to detecting errors in the system. Before testing can begin, a test plan needs to be developed. Test plan actually includes the type of testing that has to be performed on the code, resources for testing, how the software will be tested. There are several types of testing during the test phase, that includes quality assurance testing (QAT), System Integration testing (SIT), and user acceptance testing (UAT).

- Quality Assurance (QA) Testing: In this the procedures and processes are checked. This means whether the instructions are executed as per the user requirements and commands.
- System Integration Testing (UAT): It verifies proper execution of software components and proper interfacing between components within the solution. the objective behind this testing is to validate that all software module dependencies are functionally correct and that data integrity is maintained between separate modules for the entire solution.
- User Acceptance Testing (UAT): This is the last phase of the software testing procedure. During UAT, actual software users test the software to make sure it can handle required tasks in real-world scenarios, according to specifications. UAT is one of the final and critical software project procedures that must occur before newly developed software is rolled out to actual use.

Before testing the system, we need to consider following questions in our mind:

• What is the actual problem?

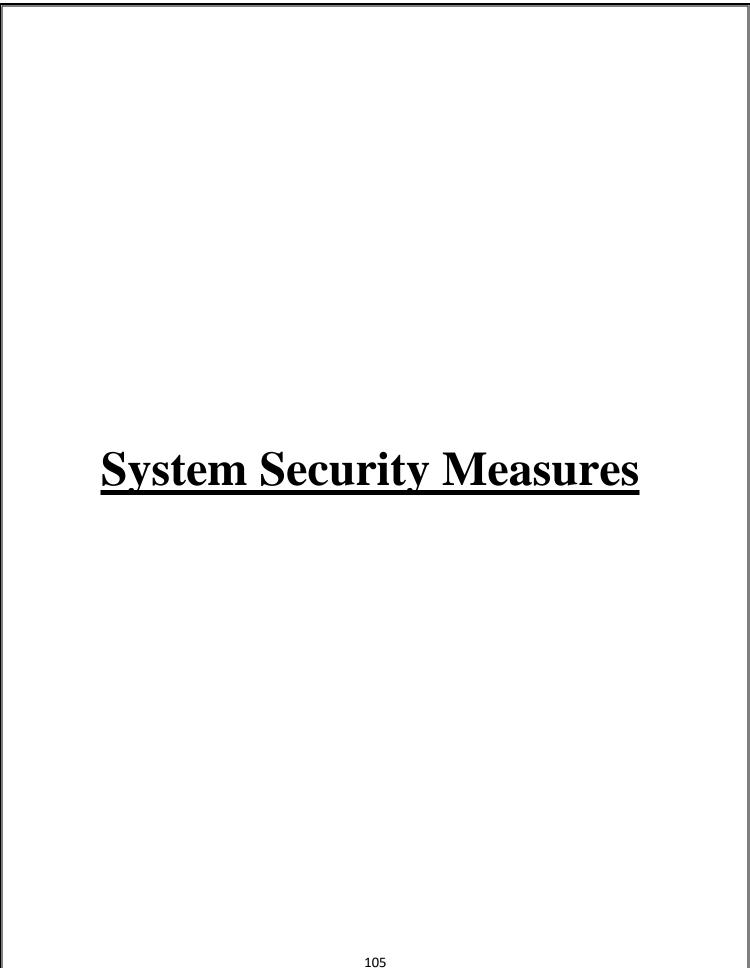
- How critical the problem is?
- Measures should be taken for the upcoming problems or errors?

Testing gives chance to upgrade or to improve if any drawbacks prevails in the application. Testing is generally done at two levels, testing of individual modules and testing entire system.

During system testing, the system is used experimentally to ensure that the software does not fall. that it will run according to its specification and in the way users expect. Testing is done throughout system development at various stages.

Following are the type of testing done in the project:

- 1. Program Testing: In this, we have to concentrate on the software part, system software should be free from errors. whether it is syntax error or logical error. In this system, we have done software testing and the output of this test is satisfactory. It fulfills all the conditions, which was required for the program testing.
- 2. Stress Testing: this test is conducted to check the performance of the system in main hours. It finds out how much workload the system can bear. In stress testing of this system, we come to know that this software can work easily and accurately at any condition. The concentration is made on the performance of the system by checking the giving input and their expected outputs.
- 3. Documentation Testing: this testing work to find out that whatever document supplied is satisfactory or there is a need to supply further document. In this system, all the documents which are supplied are satisfactory.



### Physical:

The sites containing computer systems must be physically secured against armed and malicious intruders. The workstations must be carefully protected.

#### Operating system:

The system must protect itself from accidental or purposeful security breaches.

### Networking System:

Almost all of the information is shared between different systems via a network. Intercepting these data could be just as harmful as breaking into a computer. Henceforth, Network should be properly secured against such attacks.

### **Security System Goals**

## 1. **Integrity:**

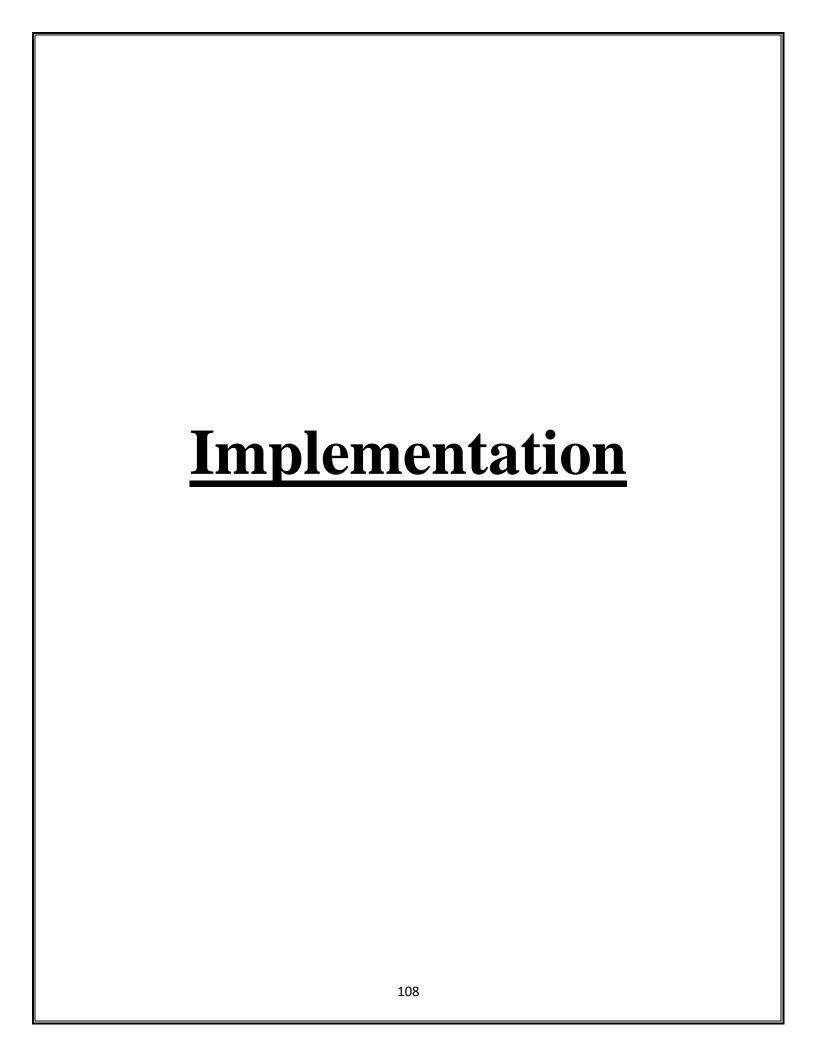
The objects in the system mustn't be accessed by any unauthorized user & any user not having sufficient rights should not be allowed to modify the important system files and resources.

### 2. **Secrecy:**

The objects of the system must be accessible only to a limited number of authorized users. Not everyone should be able to view the system files.

#### 3. Availability:

All the resources of the system must be accessible to all the authorized users i.e. only one user/process should not have the right to hog all the system resources. If such kind of situation occurs, denial of service could happen. In this kind of situation, malware might hog the resources for itself & thus preventing the legitimate processes from accessing the system resources.



Implementation refers to that stage of project during which the theory is turned into practice i.e. converting soft ideas into actual process. In this stage physical system specifications are converted into working and reliable solution. This is where the system is developed. It is followed by testing and then again implementation.

#### **Implementation phases:**

- Coding: this includes implementation of the design document into executable programming language code. The output of the coding phase is the source code for the software that acts as input to the testing and maintenance phase.
- Integration and Testing: It includes detection of errors in the software. The testing process starts with a test plan recognizes test-related activities, such as test case generation, testing criteria and resource allocation of testing. The code is tested and mapped against the design document created in the design phase.
- Installation: New system is installed and rolled out.

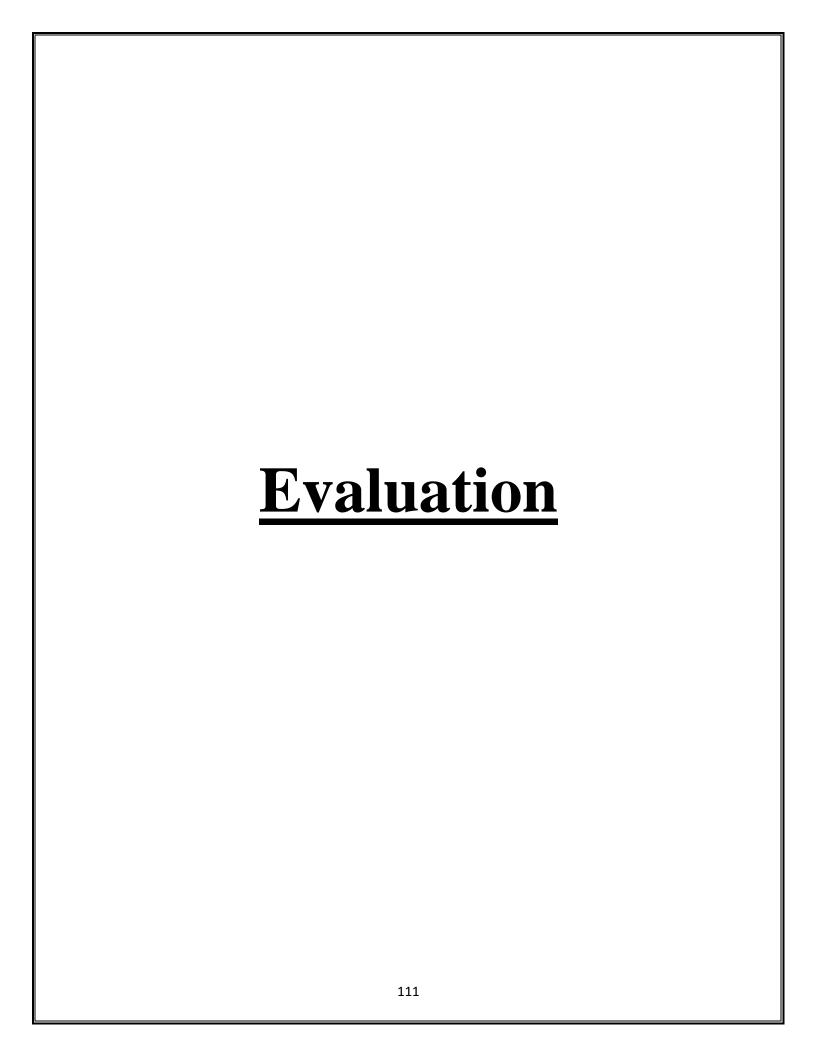
#### The steps involved in this phase are:

- 1. Acquisition and installation of hardware and software.
- 2. Conversion: It actually means to convert the old data to new format for proper functioning of the application in the new system.
- 3. User Training: User in this case has to be trained to use the system properly so that it is easy for them to grab control over the use of the application.
- 4. Documentation: This provides details of how to operate the given software, application and website.

The hardware and relevant software required for running the application must be installed and fully checked before implementation. In this phase conversion plays a crucial role. It actually means to convert the old data to a new format for proper functioning of the application in the new system.

During the phase all the required programs are loaded onto user's computer. User must be trained.

The documentation is a complete description of the system from the users point of view as it provides details of how to operate the given software and application. It also includes certain error messages that a user is expected to encounter during its usage and solution to the expected problems. It involves detained and step by step information of the project development so as to modify or update as per the new user requirements.



Evaluation is a strategy used to determine the success and impact of projects, programs, or policies. It requires the evaluator to gather important information to analyse the process and outcome of a certain project. Project evaluation prompts changes in internal workflow, detects patterns in the target audience of the project, plans for upcoming projects or reports the value of projects to external stakeholders.

## **Types of project evaluation**

The following are common types of project evaluation to implement in your projects:

### **Pre-project evaluation**

Before beginning a project, your team could evaluate whether it is feasible to complete successfully. This often takes place naturally in the developmental stage of projects and is crucial for the effective execution of the project. It is important that all involved are aware of the objectives and goals before work begins.

# **Ongoing evaluation**

Throughout the life cycle of the project, you may use metrics to verify completed tasks. This includes budget, percentage of completed tasks and the overall quality of the work delivered so far. Try to remain focused on your original objectives and goals as the project is underway, so your team remains on track.

# **Post-project evaluation**

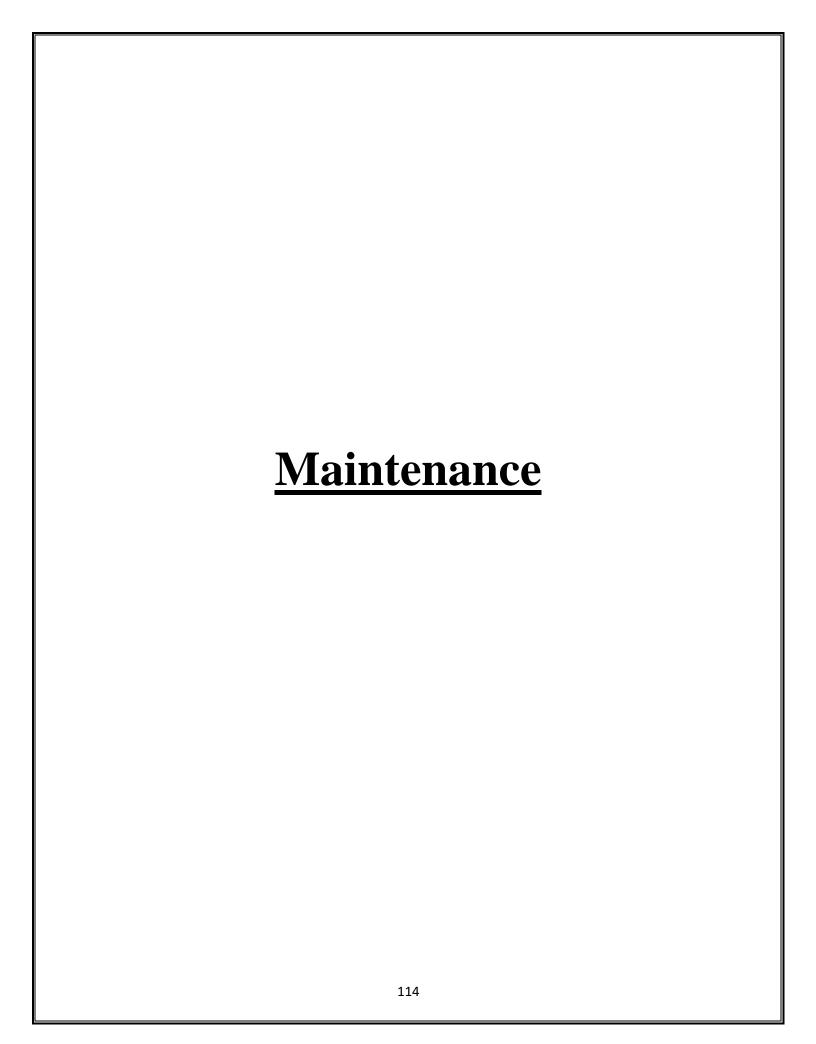
After the project is complete, it is important to analyse the outcomes and impacts of the project. Outcomes help measure how effective the project was in meeting the objectives and goals set at the beginning. Impacts may determine how successful the project was in creating a tangible change for the target audience.

#### **Self-evaluation**

At any point in the life cycle of the project, an individual can conduct a self-evaluation. Self-evaluation analyses if their work is contributing to greater objectives and goals. Recognizing strengths and weaknesses, measuring their successes, and determining the scope of their impact can increase their ability to work effectively as part of the team.

#### **External evaluation**

Another option is hiring external agencies to perform evaluations for your projects. These agencies typically have no prior connection or involvement in the project, leading to a high level of impartiality when conducting the evaluation and concluding. External evaluation is valuable for projects that include a large number of stakeholders or have several moving pieces.



All the activities that occur after the completion of the program come under the program maintenance. Moreover, it is not a part of the implementation process directly but, it plays an important role. Furthermore, the cost of maintenance is more than the cost of development. Functions of program maintenance include the following:

- Finding and correcting the errors.
- Modifying the program to enhance it. Besides, we modify it usually to adapt to some new laws or government policies. Moreover, we also have to modify it in case if we want to change the hardware or operating system.
- Update the documentation part.
- Add new features and functions.
- Remove useless parts of code. Types of Program Maintenance The types are as follows:

#### **Corrective Maintenance**

In this process, the developers fix the errors which come after the use of the software.

Moreover, the users themselves point out these errors.

#### **Preventive Maintenance**

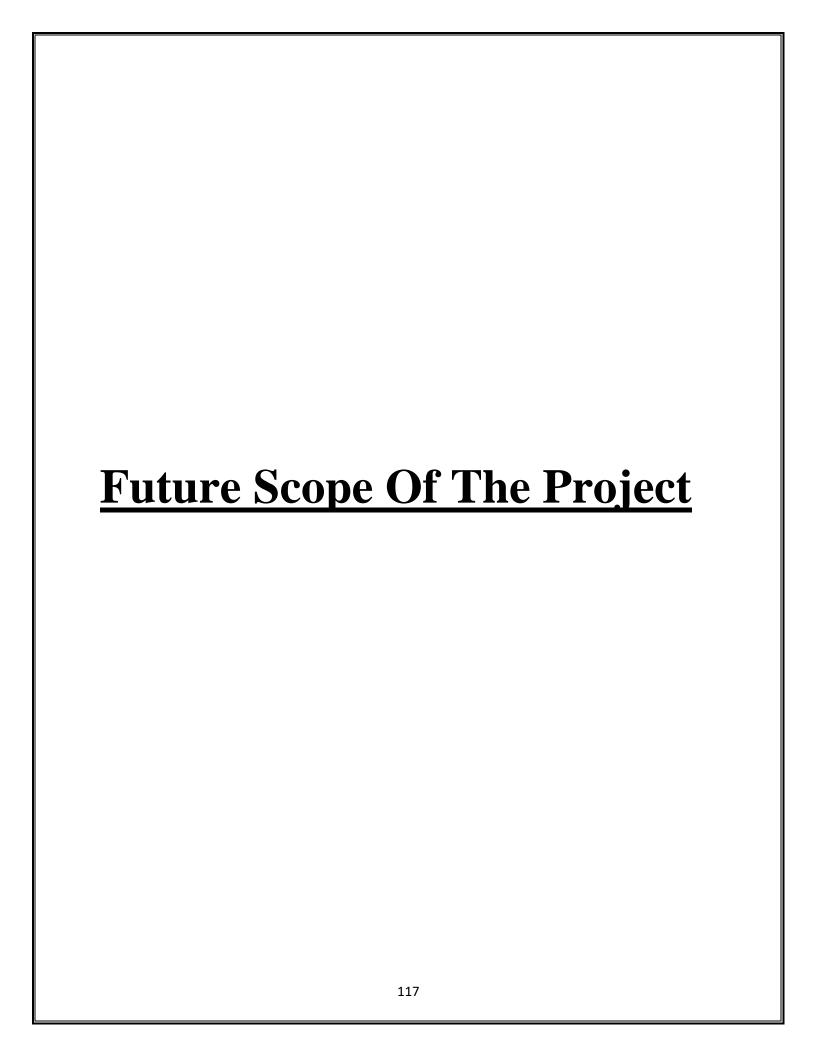
This acts as a precaution since we modify the code to avoid any errors in the future.

### **Adaptive Maintenance**

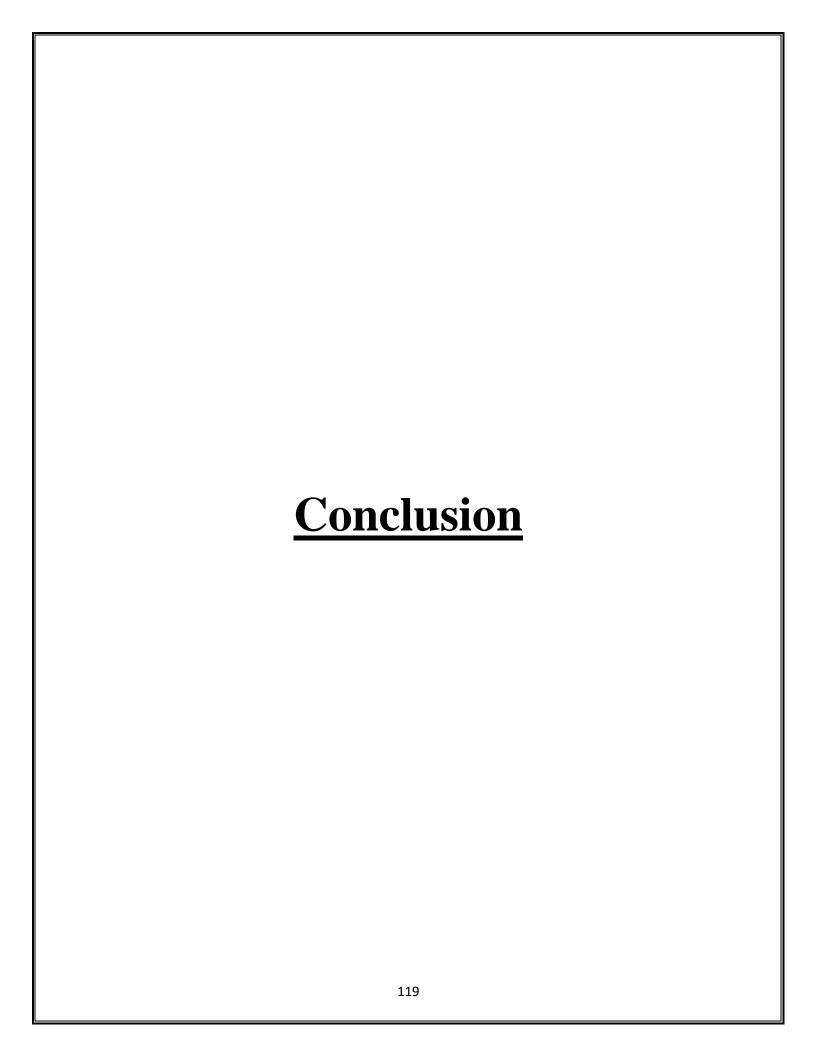
The changes in our environment may sometimes require making changes in the software as well. Therefore, it is adaptive maintenance. For example, changing the software according to some new rules of the government.

#### **Perfective Maintenance**

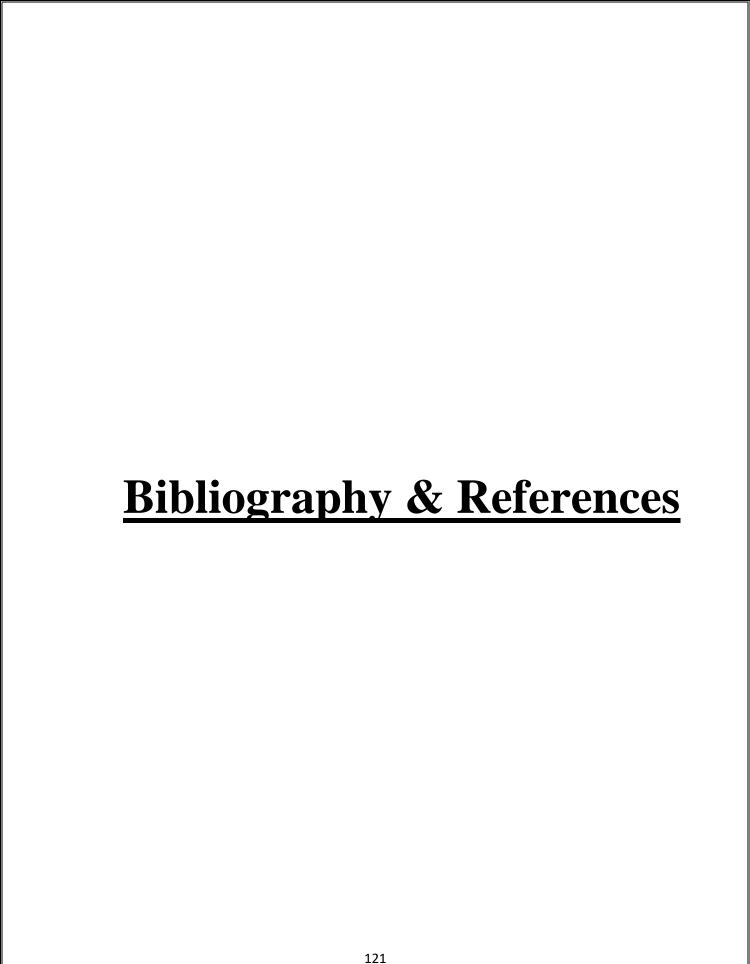
This involves aiming at keeping the software up to date with the latest technology. Moreover, programmers include any recommendations from the users, in the software.

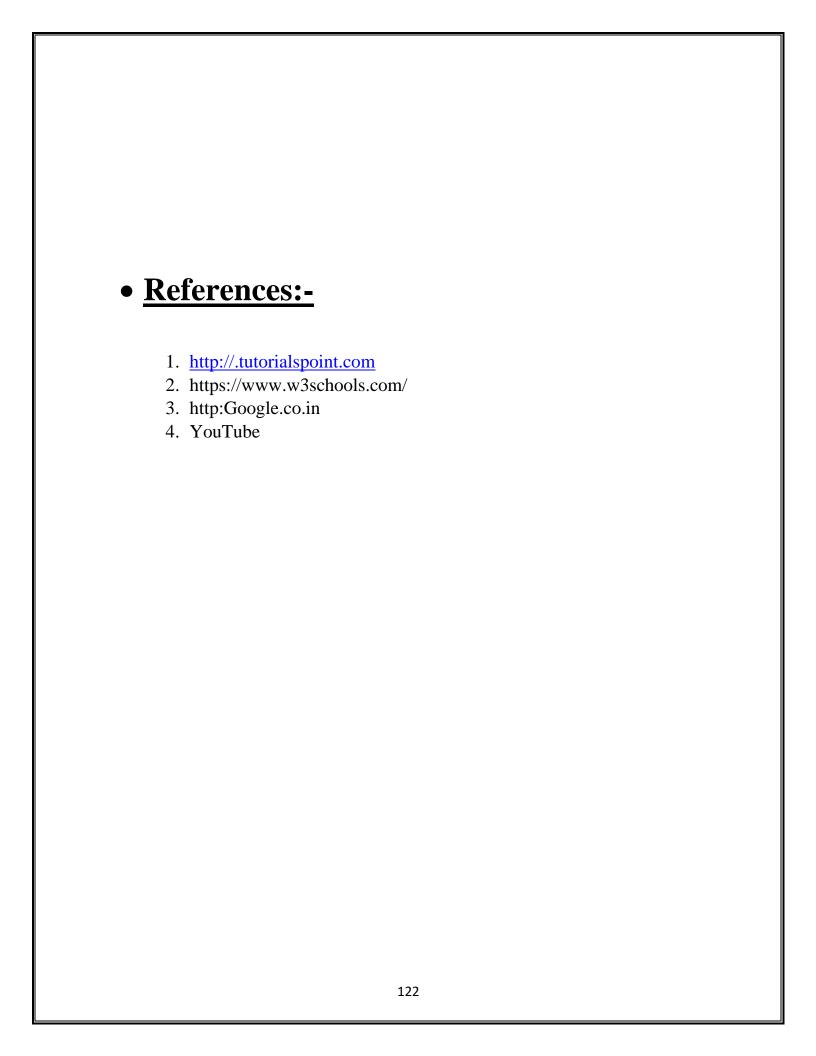


- Our application "KIDS LEARNING GAME" has limitations. It is having limited games and limited things for kids so in future we wanted to add more in our application which will help them to expand their knowledge abundantly.
- Our application is age limited as it is Childapp but in future we wanted it make it for every age group so they may use it for their benefit.
- This application has its own limitations but further there should not limitations regarding to age or games. Every age group should love our application.
- We will be regularly updating our application will try to add and make it more informational and creative.
- We will try to make it more user friendly so it can be easily accessible.
- We will be adding more sections in our application.
- We will increase compatibility of our application so it can be used both online or offline.



- We have created this application for kids so they might explore their knowledge and get more confidence and learn new vocabularies.
- We have alphabet game this will make easy for the kids to learn alphabets at young age very creatively.
- We have created this application using python language which is very popular. Our application to look more attractive and eye-soothening which will attract kids more toward it.
- Our application also has many pros and cons which will be improved as per the user's preferences.
- This application's games are not only for the entertainment but its main focus to help your children to improve and gain confidence among themselves.
- The memory game will boost up the memory power of kids so they can remember the things easily.
- This application is all about improvement and 100% beneficial.





A

**PROJECT SYNOPSIS** 

ON

# "Child Learning Game"

**Submitted to** 

# G. S. COLLEGE OF COMMERCE & ECONOMICS, NAGPUR AUTONOMOUS

In the Partial Fulfillment of B.Com. (Computer Application) Final Year Synopsis Submitted by

Deepesh R. Kalbhor Aditya B. Naoghare

Under the Guidance of Pravin J. Yadao



Shiksha Mandal's

G. S. COLLEGE OF COMMERCE & ECONOMICS, NAGPUR AUTONOMOUS

2022-2023

#### 1. Introduction:

Gaming has created its own huge world today. People play it as fun, entertainment also to learn. They are competitive and helps to build our confidence.

Now a days gaming has became a very effective way to make people learn something new and improve their capabilities. Smartphone users account for about 40% of the mobile phone market, considering the awareness among youngsters and the current trend as well as the cheaper rates. Many of these users enjoy playing games on their mobile phones.

#### 2. Objectives of the project:

- To improve the cognitive skills of the child.
- To improve the concentration of the child.
- To improve the reading and learning skills of the child.
- This game targets the child's motor skills and thinking skills to develop fully, so that it can help them in future.
- To improve the vocabulary of the child at an early stage of life.

**3.Project Category:** Desktop Application

4. Tools/ Platform/ Languages to be used: C#.NET and Visual Studio 2022

# **5. Scope of future application:**

• This application has its own limitations but further there should not limitations regarding to age or games. Every age group should love our application.

- We will be regularly updating our application will try to add and make it more informational and creative.
- We will try to make it more user friendly so it can be easily accessible.
- We will be adding more sections in our application.
- We will increase compatibility of our application so it can be used both online or offline.

Submitted by:	Approved by:

Deepesh R. Kalbhor:

Prof. Pravin Yadao Project

Aditya B. Naoghare: Guide