“Funfair Games”

Mini Project of SDF-II Lab

Submitted by:

NITIN CHAUDHARY (9921103163)

Under the supervision of:

Mrs. Arti Jain and Mr Rupesh Kumar Koshariya

(DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING)

Department of CSE/IT

Jaypee Institute of Information Technology University, Noida

Abstract

The gaming industry has experienced tremendous growth and expansion in recent decades. Children like games , especially online games. They will be definitely interested to play .

Hence , I made a simple Funfair game project in C++ programming language which can be implemented in various fair like activities . It provides an interesting playing interface by using different colours, patterns and conditions to attract players by the use of beep sound whenever the user enters wrong input. Most of the games are real life based games i.e.; normally every children knowns about these games. It includes various real life games like Number Guessing game, Snake Ladder game, Stone Paper Scissor game, Tic Tac Toe game ,Country Name Guessing game and Magic Game . The game chosen by player will run and asks to bet some money. The possibilities are to win , to lose and to draw the game . All games are completely unbiased and it will completely depend on users luck and knowledge of game to win and earn money.

Entire details of players is stored in a text file so that the owner can access the data at any time.

If I will choose to exit then the game interface will be removed and new console screen will show the net profit made by the owner from all the games and also showing all details stored in text file.

This project helps me to improve my coding skills and also make me able to know my real potential as I alone made it.

Table of Contents

	Page No.
Abstract	i
Chapter 1: INTRODUCTION	
1.1 General	3
1.2 About Games	3
1.3 Features Brief	3
Chapter 2: Problem Statement	
2.1 Problem statement	4
Chapter 3: Class Diagram and Description	
3.1 Class Diagram	5
3.2 Flow chart	6
3.3 Description	7
3.4 Special Features	10
Chapter 4: Code	
4.1 Project Code	11
Chapter 5: Screenshots of output	
5.1 Screenshots	28
Chapter 6: Conclusion of Report	
6.1 Conclusion	37
6.2 Future scope	37
Chapter 7: References	
7.1 References	38

Introduction

Funfair Games is a real life based game project which can be used to make game stalls mainly.What if school students got various real life games online in their children day stalls? It will definitely boost their happiness.Most of the games are real life based games i.e.; normally every children knows about these games. It includes various real life games like Number Guessing game, Snake Ladder game, Stone Paper Scissor game, Tic Tac Toe game ,Country Name Guessing game , Magic Game.

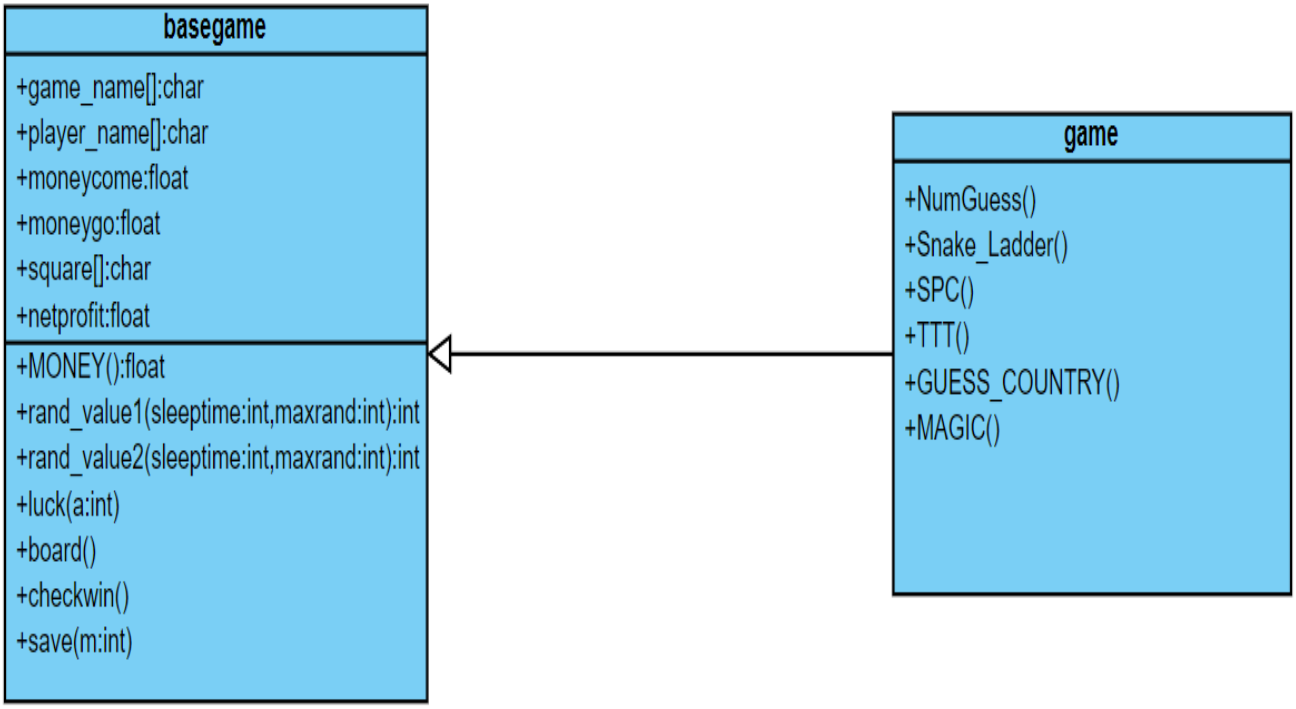
I have designed the games in such a manner that all the details of all players and their bet money will be safely stored in a text **file** . It provides an interesting playing interface and conditions to attract players. All games are completely unbiased and it will completely depend on users luck and knowledge of game to win and earn money. This project helps me to improve my coding and logical thinking skills a lot in C++ programming language.

Problem Statement

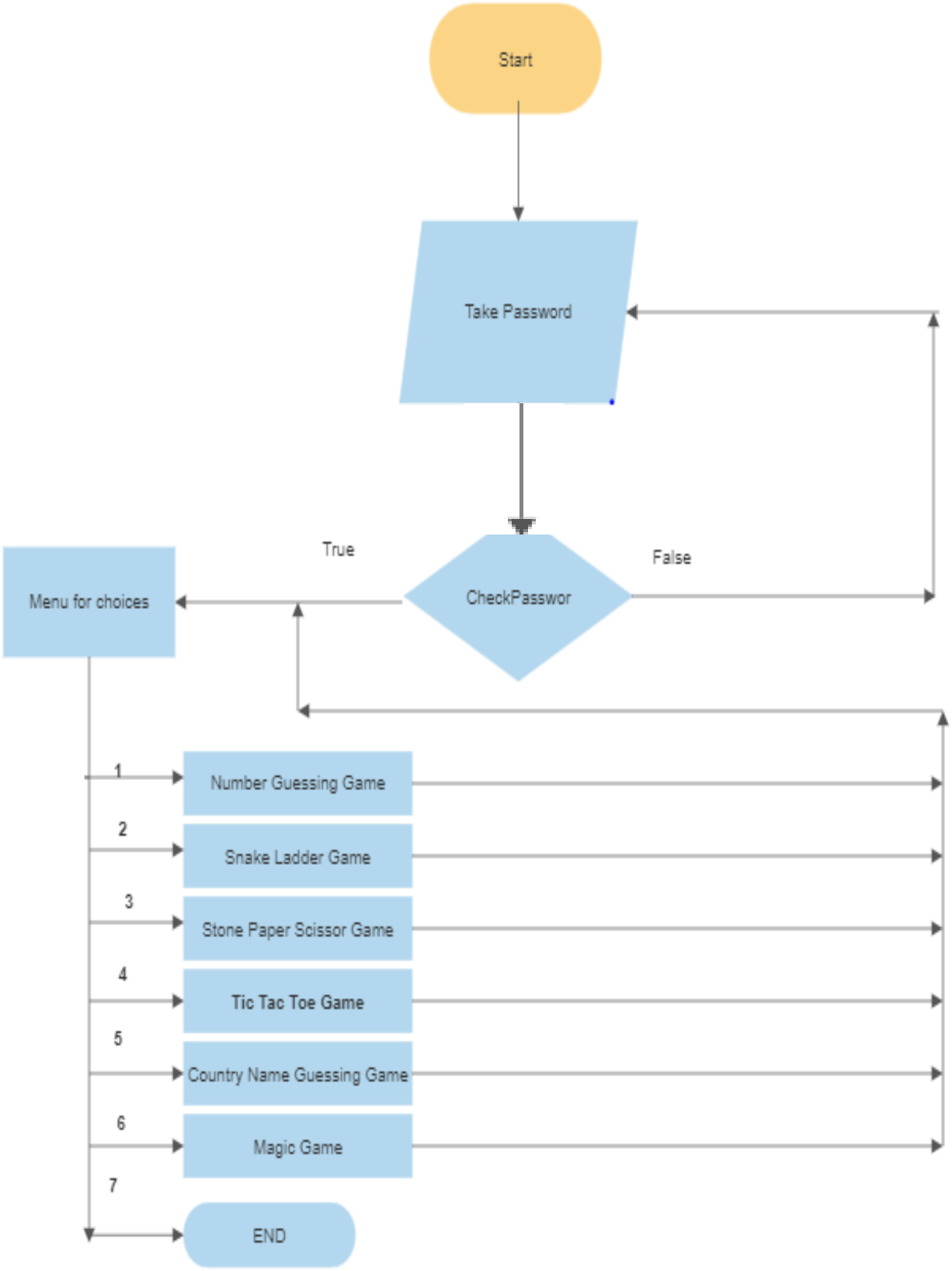
"How to provide various interested and simple real life games on single platform and to earn money by making Funfair game stall on various events like children day , various school events and college activities". The main purpose of Funfair games is to develop a project which can be used by students on children day stalls to **earn money and to entertain.**

This type of projects are really needed to make our students minds – business oriented so that they can find new ways of providing employment to other unemployed youths in future.

Class Diagram



Flow chart


Start
Take Password
True
False
CheckPasswor
Menu for choices
1
Number Guessing Game
2
Snake Ladder Game
3
Stone Paper Scissor Game
4
Tic Tac Toe Game
5
Country Name Guessing Game
6
Magic Game
7
END

Description

Rules

1:If you win game then you will get 50 percent increased of your bet money.

2:If game draws then you will get half of your bet money.

3:If you lose game then you will lose your bet money.

Number Guessing game

In this game , computer will randomly generate a number between 1 and 10 , you have to you guess that number.

Rules:

1:If you guess the number in 2 or less than 2 chances then you will won game.

2:If you guess the number in more than 3 chances then , you will lose game.

3:If you guess the number in exactly 3 chances then game will be a draw.

Snake Ladder game

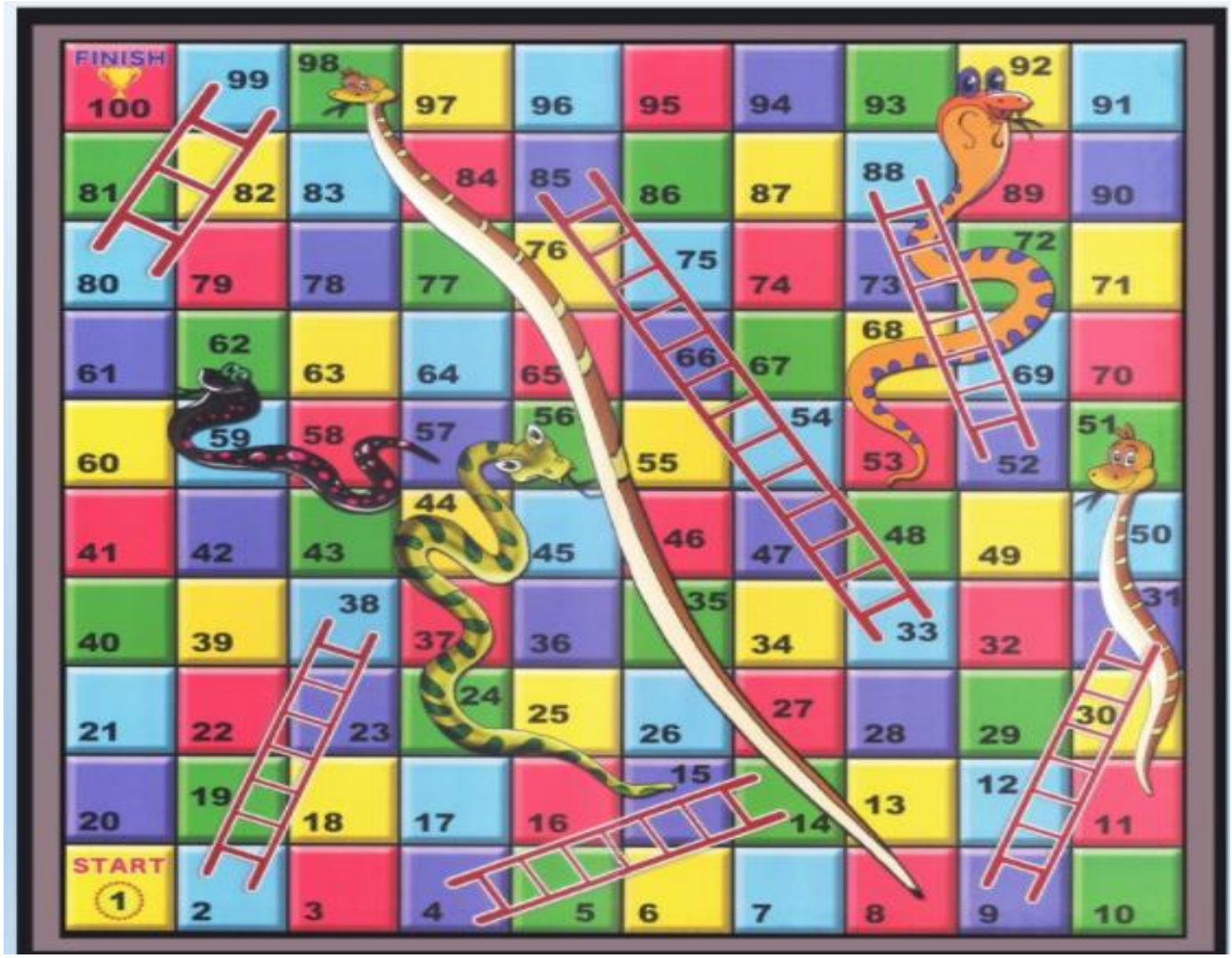
This is computer versus user game.

Rules:

1:Both computer and user will start from 1, if You reach at 100 before computer then you will won and if computer reached at 100 before you then computer will win.

2:If you accept loss then game will be a draw.

This game is based on given below picture –



Stone Paper Scissor game

This is computer versus user game. In this game , computer will randomly select any one from stone ,paper and scissor.

You have only 3 chances to win.

Rules:

1:Stone breaks scissor.

2:Paper can stop stone.

3:Scissor can cut paper.

you will have to input a numerical character, from 1 to 9, to select a position for X or O into the space you want to put it.

Tic Tac Toe gam

This is user versus owner game.

Rules:

1:The Player whose character (‘O’ or ‘X’) fills one whole row/column/diagonal is said to win.

2:If no one wins , then the game is said to be draw.

Country Name Guessing game

In this game , computer will randomly generate a country name and you have to guess its characters and name correctly to win.

Rules:

1:If you guess in only one chance then you will win.

2:If you guess in two chances then game will draws.

3:If you need more than two chances to guess then you will lose game.

Magic Game

This game is just a free game to test the mathematical knowledge of player.

You are provided some steps to follow and think some numbers in your brain without telling to the computer and computer will guess that number correctly.

SPECAL FEATURES

1:PASSWORD: This feature provides only owner access. So, no other can access the application if he/she is not aware about password.

2:BEEP SOUND: Whenever user will enter wrong input then immediately a beep sound will be created followed by "Wrong input!" statement.

3:COLOR VARIENT: Different colors in different functions are used by me to make code output interactive and best looking.

4:PATTERNS: Different patterns at different positions are used to make project good looking.

5:USER FRIENDLY:Instructions are properly given in every condition and games are completely unbiased.

6:FILE HANDLING:All data will be stored in a text file for safety purposes. It includes name of game , player name , bet money , money lose , money gain.

7:NET PROFIT:After exit net profit maked by owner will be printed and saved in file.

8:Showing file data: After exit complete text file data will be printed on screen.

9:ERROR HANDLING:Code is written in such a way that it can handle any wrong input by the user at any time at any place during playing any game.

10: COMMENTS : It is very easy to understand code with the help of comments provided in the code at all relevant and required places.

Code-

```
//Project is designed using OBJECT ORIENTED PROGRAMMING LANGUAGE C++
#include<stdlib.h>//This library is used by me to use rand() and srand() function to
generate random number.
#include<string>
#include<iostream>
#include<fstream>
#include <conio.h>//Used because it contains getch() function which is used in password
code.
#include<exception>
#include <windows.h>//Used because it contains beep function to create sounds of different
frequencies.
#include<ctime>
using namespace std;
class basegame{
public:
char game_name[50];
char player_name[100];
float moneycome,moneygo;
char square[10]={'o','1','2','3','4','5','6','7','8','9'};
//static float netprofit;
float netprofit;
float MONEY()
{
    float money;
    a:
    cout<<"\nHow much money(Rs) do you want to bet?";
    cin>>money;
    if(!cin){
        cin.clear();
        fflush(stdin);
        Beep(300,500);
        cout<<"wrong input\n\n\a";
        goto a;
        }
        return money;
}
int rand_value1(int sleeptime, int maxrand)
{
    int roll;
    time_t t;
    Sleep(sleeptime);
    srand((unsigned)time(&t));
    roll=rand()%maxrand+1;
    return roll;}
int rand_value2(int sleeptime, int maxrand){
```

```
int roll;
    time_t t;
    Sleep(sleeptime);
    srand((unsigned)time(&t));
    roll=rand()%maxrand+2;
    return roll;
}
void luck(int *a)
{
    system("color 4");
    switch(*a)
    {
    case 2:
        cout<<"got ladder\n";
        *a=38;
        cout<<"reached at"<<*a<<endl;
        break;
    case 4:
        cout<<"got ladder\n";
        *a=14;
        cout<<"reached at"<<*a<<endl;
        break;
    case 9:
        cout<<"got ladder\n";
        *a=31;
        cout<<"reached at"<<*a<<endl;
        break;
    case 45:
        cout<<"snakes mouth\n";
        *a=15;
        cout<<"reached at"<<*a<<endl;
        break;
    case 50:
        cout<<"snakes mouth\n";
        *a=11;
        cout<<"reached at"<<*a<<endl;
        break;
    case 52:
        cout<<"got ladder\n";
        *a=88;
        cout<<"reached at"<<*a<<endl;
        break;
    case 62:
        cout<<"snakes mouth\n";
        *a=57;
        cout<<"reached at"<<*a<<endl;
        break;
    case 80:
        cout<<"got ladder\n";
        *a=99;
```

```
        cout<<"reached at"<<*a<<endl;
        break;
    case 92:
        cout<<"snakes mouth\n";
        *a=53;
        cout<<"reached at"<<*a<<endl;
        break;
    case 98:
        cout<<"snakes mouth\n";
        *a=8;
        cout<<"reached at"<<*a<<endl;
        break;
    }
}
void board()
{
    system("color 5");
    cout<<"\n\n\tTic Tac Toe\n\n";
    cout<<"Player 1 (X)  -  Player 2 (O)\n\n\n";
    cout<<"     |     |     \n";
    cout<<"  "<<square[1]<<"  |  "<<square[2]<<"  |  "<<square[3]<<"\n" ;
    cout<<"_____|_____|_____\n";
    cout<<"     |     |     \n";
    cout<<"  "<<square[4]<<"  |  "<<square[5]<<"  |  "<<square[6]<<"\n" ;
    cout<<"_____|_____|_____\n";
    cout<<"     |     |     \n";
    cout<<"  "<<square[7]<<"  |  "<<square[8]<<"  |  "<<square[9]<<"\n" ;
    cout<<"     |     |     \n\n";
};


int checkwin()
{
    if (square[1] == square[2] && square[2] == square[3])
        return 1;

    else if (square[4] == square[5] && square[5] == square[6])
        return 1;

    else if (square[7] == square[8] && square[8] == square[9])
        return 1;

    else if (square[1] == square[4] && square[4] == square[7])
        return 1;

    else if (square[2] == square[5] && square[5] == square[8])
        return 1;

    else if (square[3] == square[6] && square[6] == square[9])
        return 1;
```

```
    else if (square[1] == square[5] && square[5] == square[9])
        return 1;

    else if(square[3] == square[5] && square[5] == square[7])
        return 1;

    else if(square[1]!='1'&&square[2]!='2'&& square[3]!=
'3'&&square[4]!='4'&&square[5]!='5'&&square[6]!='6'&&square[7]!='7'&&square[8]!='8'&&squar
e[9]!='9')
        return 0;
    else
        return  -1;
}

void save(int m){
    ofstream show;
    savelabel:
    show.open("1funfair.txt",ios::app);
    if (show.is_open()){}
    else
    {
    goto savelabel;
    }
    show<<endl<<game_name<<"\t\t"<<player_name<<"\t\t\t"<<m<<"\t\t\t\t"<<moneycome<<"\t\t\
t\t\t"<<moneygo<<endl;
    show.close();
    }
};

class game:public basegame
{
    public:
    void NumGuess()
    {
        system("color 9F");
        cout<<"\n********WELCOME TO NUMBER GUESSING GAME";
        strcpy(game_name,"NUMBER GUESSING GAME");
        cout<<"\nRULES:";
        cout<<"\n1-If you guess the number in 2 or less than 2 chances then you will win
and you will get 50 percent increase on your bet money";
        cout<<"\n2-If you guess the number in more than 3 chances then , you will loose
both your bet money and game";
        cout<<"\n3-If you guess the number in 3 chances then game will be a draw and you
will get half of your bet money";
        float m=MONEY();
        int w_n;
        w_n=rand_value1(0,10);
        int guess=1,num;
        b:
        cout<<"\nGuess a number from 1 to 10 : ";
        cin>>num;
```

```
        if(num<1||num>10||!cin)
        {
            cin.clear();
            fflush(stdin);
            Beep(300,500);
            cout<<"wrong input\n\n\a";
            goto b;
        }
        while(1)
            {
            if(num==w_n)
                {
                cout<<"\nYou won";
                cout<<"\nYou guess this number in "<<guess<<" times";
                break;
                }
            else
                {
                if(num<w_n)
                    cout<<"\ntoo low";
                else
                {
                    cout<<"\ntoo high";
                }
                c:
                cout<<"\ntry to guess again : ";
                cin>>num;
                if(num<1||num>10||!cin)
                    {
                    cin.clear();
                    fflush(stdin);
                    Beep(300,500);
                    cout<<"wrong input\n\n\a";
                    goto c;
                    }
                guess++;
                }

            }
        if(guess>3)
                {
                cout<<"\n\nfinally you loose because you guess the number in more than 2
times ";
                cout<<"\nso,you loose your rupees "<<m;
                moneycome=m;
                moneygo=0;
                }

        else if(guess==3)
            {
            cout<<"\n\nfinally game draws";
```

```
            cout<<"\nyou loose your half money,so you will get rupees "<<m/2;
            moneycome=m/2;
            moneygo=0;
            }
        else
            {
            cout<<"\n\nfinally you won";
            cout<<"\nyou won rupees "<<m+(m/2);
            moneycome=0;
            moneygo=m/2;
            }
netprofit+=(moneycome-moneygo);
save(m);
}


void Snake_Ladder()
{
    strcpy(game_name,"SNAKE AND LADDER GAME");
    system("color 3F");
    cout<<"***WELCOME TO SNAKE AND LADDER GAME computer vs you***\n";
    cout<<"\nRULES:";
    cout<<"\n1-Both will start from 1\nif You reach at 100 before computer then you will
win and if computer reached at 100 before you then computer will win\n";
    cout<<"2-if you will win then you will get 50 percent increase on your bet money";
    cout<<"\n2-If you loss then you will loss your bet money";
    cout<<"\n3-If you accept loss and press 2 then game will be a draw and you will get
half of your bet money";
    float m=MONEY();
    int
a[10][10]={100,99,98,97,96,95,94,93,92,91,81,82,83,84,85,86,87,88,89,90,80,79,78,77,76,75,
74,73,72,71,61,62,63,64,65,66,67,68,69,70,60,59,58,57,56,55,54,53,52,51,41,42,43,44,45,46,
47,48,49,50,40,39,38,37,36,35,34,33,32,31,21,22,23,24,25,26,27,28,29,30,20,19,18,17,16,15,
14,13,12,11,1,2,3,4,5,6,7,8,9,10};
    int choice=1,you=1,comp=1,i,j;
    cout<<"10X10 grid is\n";
    for(i=0;i<10;i++)
    {
        for(j=0;j<10;j++)
        {
            cout<<a[i][j]<<"\t";
        }
         cout<<"\n";
    }
    int check=0;
    while(choice!=2&&you!=100&&comp!=100)
    {
        p:
        cout<<"\nenter your choice: 1 to roll the dice , 2 to exit this game if you accept
loss:";
        cin>>choice;
```

```
        if(choice<1||choice>2||!cin){
            cin.clear();
            fflush(stdin);
            Beep(300,500);
            cout<<"wrong input\n\a";
            goto p;
        }
        if(choice==1)
        {
            Beep(120,800);
            int a=rand_value1(10,6);
            cout<<"\ndice:"<<a<<"\n";
            if((you+a)<=100)
            {

            you+=a;
            cout<<"you: "<<you<<"\n";
            int *p=&you;
            luck(p);
            if(you==100)
            {
                cout<<"you won the match";
                cout<<"\nyou won rupees "<<m+(m/2);
                moneycome=0;
                moneygo=m/2;
                check++;
                break;
            }
            }
            else
            {
                cout<<"you can not move forward at this chance\n";
            }
            fflush(stdin);
            int b=rand_value2(20,7)-1;
            if(b==7){b--;}
            cout<<"\ndice:"<<b<<"\n";
            if((comp+b)<=100)
            {
            comp+=b;
            cout<<"computer:"<<comp<<"\n";
            int *q=&comp;
            luck(q);
            if(comp==100)
            {
                cout<<"computer won the match";
                cout<<"\nso,you loose your rupees "<<m;
                moneycome=m;
                moneygo=0;
                check++;
                break;
```

```
            }
            }
            else{
                cout<<"computer can not move forward at this chance\n";
            }
        }
    }
    if(check==0)
    {
        cout<<"you accepted loss";
        cout<<"\nso you loose your half money,so you will get rupees "<<m/2;
        moneycome=m/2;
        moneygo=0;
    }
netprofit+=(moneycome-moneygo);
save(m);
}

void SPC()
{
    system("color 0A");
        strcpy(game_name,"StonePaperScissorGame");
        system("color 2F");
        cout<<"\n\nWELCOME TO STONE,PAPER,SCISSOR GAME";
        cout<<"\n\nRULES:";
        cout<<"\n1-You have only 3 chances";
        cout<<"\n2-If you won,you will get 50 percent increased of your bet money";
        cout<<"\n3-If you loose , you will loose your bet money";
        cout<<"\n4-If game draws,you will get half of your bet money";
        float m=MONEY();
        getchar();
        int pc_points=0;
        int your_points=0;
        int i=0;
        char a[]="spc";
        while(i<=2)
            {
            int b=rand_value1(1,2);
            char c;
            cout<<"\n\nEnter s for stone , p for paper and c for scissor:";
            cin>>c;
            fflush(stdin);
            if(c!='s'&&c!='p'&&c!='c')
            {
                Beep(300,500);
                cout<<"\nyou has given wrong input\a";
                continue;
            }
            if(a[b]==c)
                {
                cout<<"\ngame draw because computer chooses "<<a[b];
```

```
                cout<<"\nyour points till now= "<<your_points<<" ,computer points till
now="<<pc_points;
                }
            else if((a[b]=='c'&&c=='p')||(a[b]=='s'&&c=='c')||(a[b]=='p'&&c=='s'))
                {
                cout<<"\nyou loose because computer chooses "<<a[b];
                pc_points++;
                cout<<"\nyour points till now= "<<your_points<<" ,computer points till
now="<<pc_points;
                }
            else
                {
                cout<<"\nyou won because computer chooses "<<a[b];
                your_points++;
                cout<<"\nyour points till now="<<your_points<<"computer points till
now="<<pc_points;
                }
            i++;
            }
        cout<<"\n\noverall your points="<<your_points;
        cout<<"\noverall computer points="<<pc_points;
        if(pc_points>your_points)
            {
            cout<<"\n\nfinally you loose";
            cout<<"\nyou loose your rupees "<<m;
            moneycome=m;
            moneygo=0;
            }
        else if(pc_points==your_points)
            {
            cout<<"\n\nfinally game draws";
            cout<<"\nyou loose your half money,so you will get rupees "<<m/2;
            moneycome=m/2;
            moneygo=0;
            }
        else
            {
            cout<<"\nfinally you won";
            cout<<"\nyou win rupees "<<m+(m/2);
            moneycome=0;
            moneygo=m/2;
            }
netprofit+=(moneycome-moneygo);
save(m);
}
void TTT()
{
    strcpy(game_name,"  TIC TAC TOE GAME    ");
    system("color FD");
    cout<<"\n\nWELCOME TO TIC TAC TOE GAME";
        cout<<"\n\nRULES:You are player 1";
```

```
    cout<<"\n1-If you won,you will get 50 percent increased of your bet money";
    cout<<"\n2-If you loose , you will loose your bet money";
    cout<<"\n3-If game draws,you will get half of your bet money";
    float m=MONEY();
int player=1,i,choice;
char mark;
do
{
    board();
    player=(player%2)?1:2;
    k:
    cout<<"\nPlayer "<<player<<" enter a number:";
    cin>>choice;
    if(choice<1||choice>9||!cin){
        cin.clear();
        fflush(stdin);
        Beep(300,500);
        cout<<"Wrong input!";
        goto k;
    }
    getchar();
    mark=(player==1)?'X':'O';
    if(choice==1&&square[1]=='1')
        square[1]=mark;
    else if(choice==2&&square[2]=='2')
        square[2]=mark;
    else if(choice==3&&square[3]=='3')
        square[3]=mark;

    else if(choice==4&&square[4]=='4')
        square[4]=mark;
    else if(choice==5&&square[5]=='5')
        square[5]=mark;
    else if(choice==6&&square[6]=='6')
        square[6]=mark;
    else if(choice==7&&square[7]=='7')
        square[7]=mark;
    else if(choice==8&&square[8]=='8')
        square[8]=mark;

    else if(choice==9&&square[9]=='9')
        square[9] = mark;

    else
    {
        cout<<"Invalid move\a ";
        player--;
        getchar();
    }
    i=checkwin();
    player++;
```

```
    }while(i ==  - 1);

    board();

    if(i==1)
        {
        int p=player-1;
        if(p==1)
            {
                cout<<"==>\aPlayer "<<p<<" win ";
                cout<<"\nyou win rupees "<<m+(m/2);
                moneycome=0;
                moneygo=m/2;
            }
        else
        {
            cout<<"==>\aPlayer "<<p<<" win ";
            cout<<"\nyou loose your rupees "<<m;
            moneycome=m;
            moneygo=0;

        }
        }
    else
        {
        cout<<"==>\aGame draw";
        cout<<"\nyou loose your half money,so you will get rupees"<<m/2;
        moneycome=m/2;
        moneygo=0;
        }
    square[0]='0';
    square[1]='1';
    square[2]='2';
    square[3]='3';
    square[4]='4';
    square[5]='5';
    square[6]='6';
    square[7]='7';
    square[8]='8';
    square[9]='9';
    netprofit+=(moneycome-moneygo);
    save(m);
}
void GUESS_COUNTRY()
{
    strcpy(game_name,"COUNTRY GUESSING GAME");
    system("color 4F");
    cout<<"\n***WELCOME TO COUNTRY GUESSING GAME***";
    cout<<"\nRULES:\n";
    cout<<"1:All names are in small letters\n";
```

```
    cout<<"2:-If you guess in only one chances then you will won and you will get 50
percent increased of your bet money\n";
    cout<<"3-If you guess in two chances then game will draw and you will get half of your
bet money\n";
    cout<<"4:-If you  need more than two chances to guess then you will lose game and you
will lose your bet money\n\n";
    float m=MONEY();
    int b;
    char *a[]={"india","america","china","pakistan","australia","nepal","bhutan"};
    b=rand_value1(0,7)-1;
    char name[30],n[30],na[30];
    strcpy(name,a[b]);
    strcpy(n,name);
    strcpy(na,n);
    char c[30],x;
    int i;
    cout<<"\n\n";
    for(i=0;name[i]!='\0';i++)
        {
        c[i]='*';
        cout<<"*";
        }
    getchar();
    for(i=0;i<2;i++)
        {
        cout<<"\nguess a letter:";
        cin>>x;
        fflush(stdin);
        for(int j=0;name[j]!='\0';j++)
            {
                if(name[j]==x)
                    {
                    c[j]=x;
                    name[j]='*';
                    }
            }
        for(i=0;name[i]!='\0';i++)
            {
            cout<<c[i];
            }
        }
    char ans[30];
    cout<<"\nenter your guessed name:";
    cin>>ans;
    int j=0;
    for(i=0;n[i]!='\0';i++)
            {
            if(ans[i]==n[i])
                {
                continue;
                }
```

```
        else
            {
            j++;
            break;
            }
        }

    if(j==0)
        {
        cout<<"\nfinally you won";
        cout<<"\nyou won rupees "<<(m+m/2);
        moneycome=0;
        moneygo=m/2;
        }
    else
        {
        cout<<"\nyour guess is wrong";
        cout<<"\nguess a letter , its your last chance:";
        cin>>x;
        getchar();
        for(int k=0;n[k]!='\0';k++)
            {
                if(n[k]==x)
                    {
                        c[k]=x;
                        n[j]='*';
                    }
            }
        for(i=0;n[i]!='\0';i++)
            {
            cout<<c[i];
            }
        cout<<"\nenter your guessed name:";
        cin>>ans;
        getchar();
        j=0;
        for(i=0;name[i]!='\0';i++)
        {
        if(ans[i]==na[i])
            {
            continue;
            }
        else
            {
            j++;
            break;
            }
        }

        if(j==0)
        {
```

```
                cout<<"\nfinally game draws";
                cout<<"\nyou loose your half money,so you will get rupees "<<m/2;
                moneycome=m/2;
                moneygo=0;
            }
            else
            {
                cout<<"\ncorrect guess is "<<a[b];
                cout<<"\nfinally you loose";
                cout<<"\nyou loss your rupees "<<m;
                moneycome=m;
                moneygo=0;
            }
            }
netprofit+=(moneycome-moneygo);
save(m);
}
void MAGIC()
{
    strcpy(game_name,"     MAGIC GAME     ");
    system("color 02");
    float c;
    cout<<"WELCOME TO MAGIC GAME\n";
    cout<<"This game is free\n";
    cout<<"I will guess how much rupees you will left with you if you follow all steps
very carefully.\n";
    cout<<"Rule:Press enter if you have done the given task.\n";
    cout<<"1:Think how much rupees you are having wih you.\n";
    getchar();
    cout<<"2:Let same amount is given to you by your friend so make total money you are
having now ,in your mind.\n";
    getchar();
    c=rand_value1(0,500)+1;
    cout<<"3:Let i am giving you "<<c<<" rupees, so make total in your mind.\n";
    getchar();
    cout<<"4:Give half rupees for charity and caculate money you are having now.\n";
    getchar();
    cout<<"5:Give your friends rupees to your friend.\n";
    getchar();
    cout<<"You left "<<c/2<<" rupees with you.\n";
    cout<<"now think how i guess this.\n";
float m=0;
moneycome=0;
moneygo=0;
netprofit+=(moneycome-moneygo);
save(m);
}
};
int main(){
    system("color 70");
```

```
    ofstream show;
    myfilelabel:
    show.open("1funfair.txt",ios::app);
    if (show.is_open()){}
    else
    {
    goto myfilelabel;
    }
    show<<"\n        Game\t\t    Player_name  \t\tBet_money\t\t  Money_come_to_owner\t\t\t
Money_go_from_owner\n";
    show.close();
    char mypassword[]="n123";
 START:
    system("cls");
    cout<<"\nEnter Password  : ";
    char pass[32];//to store password.
    int i = 0;
    char a;
    for(i=0;;)
    {
        a=getch();
        if((a>='a'&&a<='z')||(a>='A'&&a<='Z')||(a>='0'&&a<='9'))
            //check if a is numeric or alphabet
        {
            pass[i]=a;
            ++i;
            cout<<"*";
        }
        if(a=='\b'&&i>=1)//if user typed backspace
            //i should be greater than 1.
        {
            cout<<"\b \b";//rub the character behind the cursor.
            --i;
        }
        if(a=='\r')//if enter is pressed
        {
            pass[i]='\0';
            break;
        }
    }
    fflush(stdin);
     if(strlen(pass)==strlen(mypassword)){
        int len=strlen(pass);
        int i=0;
        while(len){
            if(pass[i]==mypassword[i]){
                i++;
            }
            else{
                Beep(300,500);
                cout<<"\nWRONG PASSWORD!";
```

```
                cout<<"\nPress enter to try again";
                getchar();
                goto START;
            }
            len--;
        }
    }
    else{
        Beep(300,500);
        cout<<"\nWRONG PASSWORD!";
        cout<<"\nPress enter to try again";
         getchar();
        goto START;
    }
    game object;
    while(true){
    system("Color E4");
    int x;
    cout<<"\n\n\n************WELCOME TO FUNFAIR GAMES************\n";
    cout<<"\nEnter your name : ";
    cin>>object.player_name;
    cout<<"\nHello "<<object.player_name;
    q:
    cout<<"\n1:number guessing game\n2:Snake Ladder game\n3:Stone Paper Scissor
game\n4:Tic Tac Toe game\n5:Country guessing game\n6:Magic game \n7:exit\nEnter choice:";
    fflush(stdin);
    cin>>x;
    if(x<1||x>7||!cin){
        cin.clear();
        fflush(stdin);
        Beep(300,500);
        cout<<"Wrong Choice!";
        goto q;
    }
    system("cls");
    switch(x)
    {
    case 1:
        object.NumGuess();
        break;
    case 2:
        object.Snake_Ladder();
        break;
    case 3:
        object.SPC();
        break;
    case 4:
        object.TTT();
        break;
    case 5:
        object.GUESS_COUNTRY();
```

```
        break;
    case 6:
        object.MAGIC();
        break;
    case 7:
        break;
    }
    if(x==7)
    {
        system("color 4");
        cout<<"*********GAME EXIT**********";
        cout<<"\n\nOwners net profit is Rupees "<<object.netprofit;
        cout<<"\n*************************************************************************
**************************";
        cout<<"\n Press enter to see all players data which is stored in text file...";
        fflush(stdin);
        getchar();
        break;
    }
    }
    fflush(stdin);
    ifstream show1;
    myfilelabelnew:
    show1.open("1funfair.txt");
    if (show1.is_open()){}
    else
    {
    goto myfilelabelnew;
    }
    string line;
    while(show1){
    getline(show1,line);
    cout<<line<<endl;
    }
    show1.close();
    cout<<"\nThis is the data stored in the textfile !";
     return 0;
}
//Respected Arti ma'am and Rupesh sir , i have made this project with great dedication -
under your guidance.
//Thanks
```

Screenshots of output-

If wrong password is entered-Beep sound will come!

On entering correct password-

```
********WELCOME TO NUMBER GUESSING GAME
RULES:
1-If you guess the number in 2 or less than 2 chances then you will win and you will get 50 percent increase on your bet money
2-If you guess the number in more than 3 chances then , you will loose both your bet money and game
3-If you guess the number in 3 chances then game will be a draw and you will get half of your bet money
How much money(Rs) do you want to bet?45

Guess a number from 1 to 10 : 5
```

```
********WELCOME TO NUMBER GUESSING GAME
RULES:
1-If you guess the number in 2 or less than 2 chances then you will win and you will get 50 percent increase on your bet money
2-If you guess the number in more than 3 chances then , you will loose both your bet money and game
3-If you guess the number in 3 chances then game will be a draw and you will get half of your bet money
How much money(Rs) do you want to bet?45

Guess a number from 1 to 10 : 5

too low
try to guess again : 7

too low
try to guess again : 9

You won
You guess this number in 3 times

finally game draws
you loose your half money,so you will get rupees 22.5


************WELCOME TO FUNFAIR GAMES*************

Enter your name :
```

```
Enter your name : arman

Hello arman
1:number guessing game
2:Snake Ladder game
3:Stone Paper Scissor game
4:Tic Tac Toe game
5:Country guessing game
6:Magic game
7:exit
Enter choice:2
```

```
***WELCOME TO SNAKE AND LADDER GAME computer vs you***

RULES:
1-Both will start from 1
if You reach at 100 before computer then you will win and if computer reached at 100 before you then computer will win
2-if you will win then you will get 50 percent increase on your bet money
2-If you loss then you will loss your bet money
3-If you accept loss and press 2 then game will be a draw and you will get half of your bet money
How much money(Rs) do you want to bet?50
10X10 grid is
100     99      98      97      96      95      94      93      92      91
81      82      83      84      85      86      87      88      89      90
80      79      78      77      76      75      74      73      72      71
61      62      63      64      65      66      67      68      69      70
60      59      58      57      56      55      54      53      52      51
41      42      43      44      45      46      47      48      49      50
40      39      38      37      36      35      34      33      32      31
21      22      23      24      25      26      27      28      29      30
20      19      18      17      16      15      14      13      12      11
1       2       3       4       5       6       7       8       9       10

enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:
```

```
enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:1

dice:2
you: 3

dice:6
computer:7

enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:1

dice:5
you: 8

dice:1
computer:8

enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:1

dice:2
you: 10

dice:6
computer:14

enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:
```

```
enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:1

dice:1
you: 11

dice:6
computer:20

enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:1

dice:5
you: 16

dice:6
computer:26

enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:1

dice:2
you: 18

dice:5
computer:31

enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:1
```

Continuously playing and putting few between screenshots-

```
enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:1

dice:4
you: 35

dice:6
computer:50
snakes mouth
reached at11

enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:1

dice:2
you: 37

dice:6
computer:17

enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:1

dice:2
you: 39

dice:2
computer:19

enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:
```

Result page of snake and ladder is

```
computer:75

enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:1

dice:5
you: 42

dice:5
computer:80
got ladder
reached at99

enter your choice: 1 to roll the dice , 2 to exit this game if you accept loss:1

dice:2
you: 44

dice:1
computer:100
computer won the match
so,you loose your rupees 50


***********WELCOME TO FUNFAIR GAMES************

Enter your name : 1
```

Playing stone paper scissor game-

```
Enter s for stone , p for paper and c for scissor:s

you loose because computer chooses p
your points till now= 0 ,computer points till now=1

Enter s for stone , p for paper and c for scissor:p

you loose because computer chooses c
your points till now= 0 ,computer points till now=2

Enter s for stone , p for paper and c for scissor:c

you won because computer chooses p
your points till now=1computer points till now=2

overall your points=1
overall computer points=2

finally you loose
you loose your rupees 56


***********WELCOME TO FUNFAIR GAMES************

Enter your name :
```

Playing Tic Tac Toe game-

```
WELCOME TO TIC TAC TOE GAME

RULES:You are player 1
1-If you won,you will get 50 percent increased of your bet money
2-If you loose , you will loose your bet money
3-If game draws,you will get half of your bet money
How much money(Rs) do you want to bet?44


         Tic Tac Toe

Player 1 (X)  -  Player 2 (O)


     |     |
  1  |  2  |  3
_____|_____|_____
     |     |
  4  |  5  |  6
_____|_____|_____
     |     |
  7  |  8  |  9
     |     |


Player 1 enter a number:1
```

Result

```
Player 2 enter a number:7


         Tic Tac Toe

Player 1 (X)  -  Player 2 (O)


     |     |
  1  |  X  |  O
_____|_____|_____
     |     |
  X  |  O  |  X
_____|_____|_____
     |     |
  O  |  8  |  9
     |     |

==>Player 2 win
you loose your rupees 44


**********WELCOME TO FUNFAIR GAMES**********

Enter your name :
```

Country guessing game

```
***WELCOME TO COUNTRY GUESSING GAME***
RULES:
1:All names are in small letters
2:-If you guess in only one chances then you will won and you will get 50 percent increased of your bet money
3-If you guess in two chances then game will draw and you will get half of your bet money
4:-If you  need more than two chances to guess then you will lose game and you will lose your bet money


How much money(Rs) do you want to bet?50


*****
guess a letter:
```

```
*****
guess a letter:a
****a
enter your guessed name:india

finally you won
you won rupees 75


**********WELCOME TO FUNFAIR GAMES**********

Enter your name :
```

```
Enter your name : sonal

Hello sonal
1:number guessing game
2:Snake Ladder game
3:Stone Paper Scissor game
4:Tic Tac Toe game
5:Country guessing game
6:Magic game
7:exit
Enter choice:6
```

Magic Game

```
WELCOME TO MAGIC GAME
This game is free
I will guess how much rupees you will left with you if you follow all steps very carefully.
Rule:Press enter if you have done the given task.
1:Think how much rupees you are having wih you.
2:Let same amount is given to you by your friend so make total money you are having now ,in your mind.

3:Let i am giving you 184 rupees, so make total in your mind.

4:Give half rupees for charity and caculate money you are having now.

5:Give your friends rupees to your friend.

You left 92 rupees with you.
now think how i guess this.



**********WELCOME TO FUNFAIR GAMES**********

Enter your name :
```

```
**********WELCOME TO FUNFAIR GAMES**********

Enter your name : nitin

Hello nitin
1:number guessing game
2:Snake Ladder game
3:Stone Paper Scissor game
4:Tic Tac Toe game
5:Country guessing game
6:Magic game
7:exit
Enter choice:7
```

Text file data-

```
NUMBER GUESSING GAME        nitin        45        22.5        0

SNAKE AND LADDER GAME       arman        50        50          0

StonePaperScissorGame       1            56        56          0

  TIC TAC TOE GAME          sahil        44        44          0

COUNTRY GUESSING GAME       kahna        50        0           25

    MAGIC GAME              sonal        0         0           0


This is the data stored in the textfile !
PS C:\Users\HP\Desktop\SEM2\SDF\LAB\OOP_Project>
```

Original file data-

1funfair.txt

Game	Player_name	Bet_money	Money_come_to_owner	Money_go_from_owner
NUMBER GUESSING GAME	nitin	45	22.5	0
SNAKE AND LADDER GAME	arman	50	50	0
StonePaperScissorGame	kartik	56	56	0
TIC TAC TOE GAME	sahil	44	44	0
COUNTRY GUESSING GAME	kahna	50	0	25
MAGIC GAME	sonal	0	0	0

Conclusion

Finally I made a funfair game project by using C++ programming language using OOPs concept and file handling.These games are very interactive and easy to play by anyone. The project is designed in such a way that it can handle any error at any time. These games on single platform can be used on events like childrens day for the purpose of fun and entertainment. It includes various real life games like Number Guessing game, Snake Ladder game, Stone Paper Scissor game, Tic Tac Toe game ,Country Name Guessing game and Magic Game. Hence these games are very interactive to play.

Future scope-

I can design this project on a huge level by implementing graphics by making it more interactive and user friendly. This funfair game project has a huge future scope as in the case of children day stalls and online playing. The students from such games will come closer to coding world and also become business oriented. If every school students start making stalls on such games on their different events then a boost will come in the mindset of teenagers towards business world and hence they will try their best to form their own big MNC's in future and it will result in thousands of new job opportunities. I can provide all these games on a single platform on a app to earn money. Hence , I can say this Funfair game project has a lot of future scope .

References:

Book

[1] C++ by Ashok N. Kamthane

Online:

[1] https://www.geeksforgeeks.org/number-guessing-game-inc/#:~:text=A%20number%20guessing%20game%20is,N%20%3D%20100

[2] https://en.wikipedia.org/wiki/Tic-tac-toe

[3] https://classroom.google.com/c/NDU5MDYzMzM5Nzg3

[4] https://tutorialpoints.com