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#include<iostream>
#include<cstdlib>
#include<ctime>
#include<iomanip>
using namespace std;

class Player {
public:
    char name[30];
    Player();
    int current_pos;
    int previous_pos;
    int rollingdie();
};

Player::Player()
{
    current_pos = 1;
    previous_pos = 1;
}

int Player::rollingdie()
{
    return(rand()%(6)+1);
}

class Board {
private:
    int board[10][10];
public:
    Board();
    int nextposition(int, int);
    void display();
};

Board::Board()
{
    int i,j,k=1;
    for(i=0; i<10;++i)
        for(j=0; j<10; ++j)
            board[i][j]=k++;
}

int Board::nextposition(int a, int b)
{
    switch(a + b)
    {

        //Creating Ladders
    }
}

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case 8: cout<<"Great You Got Ladder at 8!!\n"<<endl;
        return 31;
        break;
case 15: cout<<"Great You Got Ladder at 15!!\n"<<endl;
        return 97;
        break;

case 42: cout<<"Great You Got Ladder at 42!!\n"<<endl;
        return 81;
        break;

case 66: cout<<"Great You Got Ladder at 66!!\n"<<endl;
        return 87;
        break;

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//Creating Snakes

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case 24: cout<<"Wow.... You got snake... at 24\n"<<endl;
        return 1;
        break;

case 55: cout<<"Wow.... You got snake... at 55\n"<<endl;
        return 13;
        break;

case 71: cout<<"Wow.... You got snake... at 71\n"<<endl;
        return 29;
        break;

case 88: cout<<"Wow.... You got snake... at 88\n"<<endl;
        return 54;
        break;

case 99: cout<<"Wow.... You got snake... at 99\n"<<endl;
        return 6;
        break;

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default: return (a+b);
        break;

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    }
}

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void Board::display()
{
    for(int i=9; i>=0; --i)
    {
        cout<<endl;
        if(i%2 != 0)
        {

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for(int j=9; j>=0; --j)
    if(board[i][j]==1 || board[i][j]==24)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Snake1";
    else if(board[i][j]==13 || board[i][j]==55)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Snake2";
    else if(board[i][j]==29 || board[i][j]==71)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Snake3";
    else if(board[i][j]==54 || board[i][j]==88)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Snake4";
    else if(board[i][j]==6 || board[i][j]==99)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Snake5";
    else if(board[i][j]==8 || board[i][j]==31)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Ladder1";
    else if(board[i][j]==15 || board[i][j]==97)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Ladder2";
    else if(board[i][j]==42 || board[i][j]==81)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Ladder3";
    else if(board[i][j]==66 || board[i][j]==87)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Ladder4";
    else
        cout<<setw(3)<<board[i][j]<<setw(7)<<" ";
}

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else

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for(int j=0; j<10; ++j)
    if(board[i][j]==1 || board[i][j]==24)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Snake1";
    else if(board[i][j]==13 || board[i][j]==55)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Snake2";
    else if(board[i][j]==29 || board[i][j]==71)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Snake3";
    else if(board[i][j]==54 || board[i][j]==88)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Snake4";
    else if(board[i][j]==6 || board[i][j]==99)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Snake5";
    else if(board[i][j]==8 || board[i][j]==31)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Ladder1";
    else if(board[i][j]==15 || board[i][j]==97)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Ladder2";
    else if(board[i][j]==42 || board[i][j]==81)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Ladder3";
    else if(board[i][j]==66 || board[i][j]==87)
        cout<<setw(3)<<board[i][j]<<setw(7)<<"Ladder4";
    else
        cout<<setw(3)<<board[i][j]<<setw(7)<<" ";
}

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}
}

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int main()
{

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    srand(time(0));
    Board b;
    cout<<"\n
n*****
*****\n";
    cout<<"\t\t\t\tSnakes and Ladder Board";
    cout<<"\n
n*****
*****\n";

    b.display();
    cout<<"\n
n*****
*****\n";

    Player player1, player2;
    cout<<"Enter First player name: ";
    cin>>player1.name;
    cout<<"Enter Second player name: ";
    cin>>player2.name;
    cout<<"\n ***** Main Game ####\n
n*****\n";
    cout<<"Player Name\t Position\tDice face\n";
    int score1=0, score2=0;
    int dice1_roll=0, dice2_roll=0;
    while(1)
    {
        player1.previous_pos = player1.current_pos;
        score1 = player1.rollingdie();
        dice1_roll++;
        player1.current_pos = b.nextposition(score1, player1.previous_pos);
        if(player1.current_pos > 100)
            player1.current_pos = player1.previous_pos;
        cout<<player1.name<<"\t\t"<<player1.current_pos<<"\t"<<score1<<endl;
        if(player1.current_pos == 100)
        {
            cout<<endl<<player1.name<<" won the Game "<<endl;
            cout<<"The number of times "<<player1.name<<" rolled the dice: "<<dice1_roll;
            break;
        }

        player2.previous_pos = player2.current_pos;
        score2 = player2.rollingdie();
        dice2_roll++;
        player2.current_pos = b.nextposition(score2, player2.previous_pos);
        if(player2.current_pos > 100)
            player2.current_pos = player2.previous_pos;
        cout<<player2.name<<"\t\t"<<player2.current_pos<<"\t"<<score2<<endl;
        if(player2.current_pos == 100)

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{
    cout<<endl<<player2.name<<" won the Game "<<endl;
    cout<<"The number of times "<<player2.name<<" rolled the dice: "<<dice2_roll;
    break;
}

cout<<"\n\nThe total number of times dice was rolled: "<<dice1_roll+dice2_roll<<endl;
system("pause");
return 0;
}
```