**Snake game Code**

**#include<iostream>**

**#include <cstdlib>**

**#include<time.h>**

**#include<conio.h>**

**#include<windows.h>**

**using namespace std;**

**bool gameOver;**

**const int width=20;**

**const int height=20;**

**int x,y,fruitX,fruitY,score;**

**int tailX[100],tailY[100];**

**int nTail;**

**enum eDirection { STOP=0,LEFT,RIGHT,UP,DOWN};**

**eDirection dir;**

**void Setup()**

**{**

**gameOver=false;**

**dir=STOP;**

**x = width/2;**

**y= height/2;**

**srand(time(0));**

**fruitX = rand() % width;**

**fruitY = rand() % height;**

**score = 0;**

**}**

**void Draw()**

**{**

**system("cls");**

**for(int i=0; i< width+2; i++)**

**cout << "#";**

**cout << endl;**

**for(int i=0;i<height;i++)**

**{**

**for(int j=0;j<width;j++)**

**{**

**if(j==0)**

**cout << "#";**

**if(i==y && j==x)**

**cout << "O";**

**else if(i==fruitY && j==fruitX)**

**cout << "F";**

**else**

**{**

**bool print =false;**

**for(int k=0;k<nTail;k++)**

**{**

**if(tailX[k]==j && tailY[k]==i)**

**{**

**cout << "o";**

**print = true;**

**}**

**}**

**if(!print)**

**cout << " ";**

**}**

**if(j==width-1)**

**cout << "#";**

**}**

**cout << endl;**

**}**

**for(int i=0;i < width+2;i++)**

**{**

**cout << "#";**

**}**

**cout << endl;**

**cout << "Score:" << score << endl;**

**}**

**void Input()**

**{**

**if (\_kbhit())**

**{**

**switch(\_getch())**

**{**

**case 'a':**

**dir = LEFT;**

**break;**

**case 'd':**

**dir = RIGHT;**

**break;**

**case 's':**

**dir = DOWN;**

**break;**

**case 'w':**

**dir = UP;**

**break;**

**case 'x':**

**gameOver = true;**

**break;**

**}**

**}**

**}**

**void Logic()**

**{**

**int prevX=tailX[0];**

**int prevY=tailY[0];**

**int prev2X,prev2Y;**

**tailX[0]=x;**

**tailY[0]=y;**

**for(int i=1;i<nTail;i++)**

**{**

**prev2X = tailX[i];**

**prev2Y = tailY[i];**

**tailX[i]=prevX;**

**tailY[i]=prevY;**

**prevX = prev2X;**

**prevY = prev2Y;**

**}**

**switch(dir)**

**{**

**case LEFT:**

**x--;**

**break;**

**case RIGHT:**

**x++;**

**break;**

**case UP:**

**y--;**

**break;**

**case DOWN:**

**y++;**

**break;**

**default:**

**break;**

**}**

**/\* if( x > width || x<0 || y > height || y<0)**

**{**

**gameOver = true;**

**}\*/**

**if(x>=width) x=0; else if (x<0) x= width-1;**

**if(y>=height) y=0; else if (y<0) x= height-1;**

**for(int i=0;i<nTail;i++)**

**{**

**if(tailX[i]==x && tailY[i] ==y)**

**gameOver = true;**

**}**

**if( x == fruitX && y == fruitY)**

**{**

**score = score+10;**

**fruitX = rand() % width;**

**fruitY = rand() % height;**

**nTail++;**

**}**

**}**

**int main()**

**{**

**Setup();**

**while(!gameOver)**

**{**

**Draw();**

**Input();**

**Logic();**

**Sleep(100);**

**}**

**return 0;**

**}**