#include<stdio.h>

#include<conio.h>

#include<ctype.h>

#include<stdlib.h>

#include<windows.h>

#include<time.h>

#include<string.h>

#define LEFT 1

#define RIGHT 2

#define UP 3

#define DOWN 4

void textcolor(int fc,int bc=-1){

if(fc<0 || fc>15)

return;

HANDLE h;

h = GetStdHandle(STD\_OUTPUT\_HANDLE);

if(bc>=0 && bc<16)

SetConsoleTextAttribute(h,fc|bc\*16);

else

SetConsoleTextAttribute(h,fc);

}

void textcolor(char \*fc,char \*bc=""){

int x,y=16;

char \*colors[]={"Black","Blue","Green","Aqua","Red","Purple","Yellow","White","Gray",

"LightBlue","LightGreen","LightAqua","LightRed","LightPurple","LightYellow","BrightWhite"};

for(x=0;x<16;x++)

if(strcmpi(colors[x],fc)==0)

break;

if(strlen(bc)>0)

for(y=0;y<16;y++)

if(strcmpi(colors[y],bc)==0)

break;

textcolor(x,y);

}

void textcolor(char \*fc,int bc){

int x;

char \*colors[]={"Black","Blue","Green","Aqua","Red","Purple","Yellow","White","Gray",

"LightBlue","LightGreen","LightAqua","LightRed","LightPurple","LightYellow","BrightWhite"};

for(x=0;x<16;x++)

if(strcmpi(colors[x],fc)==0)

break;

textcolor(x,bc);

}

void textcolor(int fc,char \*bc){

int y;

char \*colors[]={"Black","Blue","Green","Aqua","Red","Purple","Yellow","White","Gray",

"LightBlue","LightGreen","LightAqua","LightRed","LightPurple","LightYellow","BrightWhite"};

if(strlen(bc)>0)

for(y=0;y<16;y++)

if(strcmpi(colors[y],bc)==0)

break;

textcolor(fc,y);

}

void gotoxy(int x, int y)

{

COORD coord;

coord.X = x;

coord.Y = y;

SetConsoleCursorPosition(GetStdHandle(STD\_OUTPUT\_HANDLE), coord);

}

void getup(){

HANDLE hout;

CONSOLE\_CURSOR\_INFO cursor;

hout = GetStdHandle(STD\_OUTPUT\_HANDLE);

cursor.dwSize=1;

cursor.bVisible=false;

SetConsoleCursorInfo(hout, &cursor);

system("mode con:cols=80 lines=25");

system("title Snake Game - www.youtube.com/projectcoding");

system("cls");

textcolor("LightPurple");

printf("\n %c",218);

int x;

for(x=0;x<75;x++)

printf("%c",196);

printf("%c ",191);

for(x=0;x<17;x++){

gotoxy(2,x+2);

printf("%c",179);

gotoxy(78,x+2);

printf("%c ",179);

}

printf(" %c",192);

for(x=0;x<75;x++)

printf("%c",196);

printf("%c ",217);

printf(" %c",218);

for(x=0;x<21;x++)

printf("%c",196);

printf("%c\n",191);

printf(" %c S N A K E G A M E %c\n",179,179);

printf(" %c",192);

for(x=0;x<21;x++)

printf("%c",196);

printf("%c",217);

gotoxy(59,20);

printf("%c",218);

for(x=0;x<18;x++)

printf("%c",196);

printf("%c",191);

gotoxy(59,21);

printf("%c SCORE : 100 %c",179,179);

gotoxy(59,22);

printf("%c STATUS: Playing %c",179,179);

gotoxy(59,23);

printf("%c",192);

for(x=0;x<18;x++)

printf("%c",196);

printf("%c",217);

gotoxy(28,20);

printf("Press 'x' to Exit");

gotoxy(28,21);

printf("Press Space to Pause and Play");

gotoxy(10,23);

textcolor("white","blue");

printf(" www.youtube.com/projectcoding ");

textcolor(7);

}

void score(int sc){

gotoxy(69,21);

printf("%6d",sc\*10);

}

void status(char \*s,int c=7){

gotoxy(69,22);

textcolor(c);

int x;

for(x=0;x<strlen(s);x++)

printf("%c",s[x]);

for(;x<8;x++)

printf(" ");

textcolor(7);

}

int main(){

getup();

register int flow,size,i,xb,yb;

int speed,restart=1,tmp,xpos[100],ypos[100],scr;

srand(time(NULL));

while(true){

if(restart){

status("Playing",10);

for(int k=1;k<75;k+=2)

for(int j=0;j<17;j++){

gotoxy(k+3,j+2);

printf(" ");

}

size=5;

speed=200;

scr=0;

score(scr);

flow=RIGHT;

xpos[0]=20;

for(i=0;i<size;i++){

xpos[i]=xpos[0]-i\*2;

ypos[i]=10;

}

for(i=0;i<size;i++){

gotoxy(xpos[i],ypos[i]);

printf("o");

}

for(tmp=1;true;){

do{

xb=rand()%75+3;

}while(xb%2!=0);

yb=rand()%17+2;

for(i=0;i<size;i++)

if(xb==xpos[i] && yb==ypos[i]){

tmp=0; break;

}

if(tmp)

break;

}

gotoxy(xb,yb);

textcolor("lightgreen");

printf("@");

textcolor(7);

restart=0;

}

while(!kbhit() && !restart) {

if(xpos[0]==xb && ypos[0]==yb){

for(tmp=1;true;){

do{

xb=rand()%75+3;

}while(xb%2!=0);

yb=rand()%17+2;

for(i=0;i<size;i++)

if(xb==xpos[i] && yb==ypos[i]){

tmp=0; break;

}

if(tmp)

break;

}

gotoxy(xb,yb);

textcolor("lightgreen");

printf("@");

textcolor(7);

size++;

scr++;

speed-=3;

score(scr);

}

gotoxy(xpos[size-1],ypos[size-1]);

for(i=size-1;i>0;i--){

xpos[i]=xpos[i-1];

ypos[i]=ypos[i-1];

}

switch(flow){

case RIGHT :xpos[i]+=2; break;

case LEFT : xpos[i]-=2; break;

case UP : ypos[i]-=1; break;

case DOWN : ypos[i]+=1;

}

tmp=1;

for(i=1;i<size;i++)

if(xpos[i]==xpos[0] && ypos[i]==ypos[0]){

tmp=0;

break;

}

if(xpos[0]>76 || xpos[0]<4 || ypos[0]<2 ||ypos[0]>18)

tmp=0;

if(tmp){

printf(" ");

gotoxy(xpos[0],ypos[0]);

printf("O");

gotoxy(xpos[1],ypos[1]);

printf("o");

}

else{

textcolor("LIGHTRED");

printf("o");

gotoxy(xpos[1],ypos[1]);

printf("O");

for(i=2;i<size;i++){

gotoxy(xpos[i],ypos[i]);

printf("o");

}

textcolor(7);

status("GameOver",12);

restart=1;

getch();

}

//delay(speed);

Sleep(speed);

}

char ch=getch();

switch(tolower(ch)){

case 'x' : system("cls");

return 0;

case ' ' : status("Paused");

while(true){

char z=getch();

if(z=='x')

return 0;

if(z==' ')

break;

}

status("Playing",10);

break;

case -32: {

char chh=getch();

if(chh==72 && flow!=DOWN)

flow=UP;

else if(chh==80 && flow!=UP)

flow=DOWN;

else if(chh==75 && flow!=RIGHT)

flow=LEFT;

else if(chh==77 && flow!=LEFT)

flow=RIGHT;

break;

}

}

}

}