#include <iostream> JEREMY FANUEL

#include <string> 218116757

#include <conio.h>

#include <vector>

#include <windows.h>

#include <cstdlib>

#include <time.h>

using namespace std;

int main()

{

int max\_score = 0;

string nama[5] = {"------","------","------","------","------"};

int chance[2] = {1,0}; //random chance

int gerakan[3] = {-1,0,1}; // random gerakan musuh

char main\_lagi = 'Y'; //ngasih retry

srand(time(NULL));

char keyboard = 'd'; //jalannya uler

string map1[20][40]; // lebar map1

string map2[20][80]; // lebar map2

//===================

// Deklarasi posisi awal snake

int snakex[500]; // batas panjang snake

int snakey[500];

int panjang = 2; //deklarasi panjang snake

snakex[0] = 8; // kepala

snakey[0] = 15;

snakex[1] = 7; // buntut

snakey[1] = 15;

//===================

int powerL\_x;

int powerL\_y = rand() % 19 + 1;

bool powerL = false ; //powerup L

//koordinat powerup

if (powerL==true){

powerL\_x = rand() % 79 + 1;

}

else if (powerL==false){

powerL\_x = rand() % 39 + 1;

}

//koordinat powerup

int score = 0;

int highscore[5] = {0,0,0,0,0};

bool gameover = false;

//============================DEKLARASI VEKTOR MAKANAN=========================

vector<int>random\_posx\_makanan;

vector<int>random\_posy\_makanan;

for (int i = 0 ; i < 5 ; i++){

int randomy =1+rand()%18;

int randomx;

if (powerL==false){

randomx =1+rand()%38;

}

else if (powerL==true){

randomx =1+rand()%78;

}

random\_posx\_makanan.push\_back(randomx); // masuk ke vektor x

random\_posy\_makanan.push\_back(randomy); // masuk ke vektor y

//cout << random\_posx\_makanan[i] << " ";

//cout << random\_posy\_makanan[i] << " ";

}

//=====================================================================

while (main\_lagi == 'Y'&&gameover==false||main\_lagi == 'y'&&gameover==false){

if (powerL==true){

map2[powerL\_y][powerL\_x] = ' ';

map1[powerL\_y][powerL\_x] = ' ';

}

//==============GERAKAN SNAKE===============

if (kbhit()){

keyboard = getch();

}

if (keyboard == 'w' ||keyboard == 'W'){

snakey[0]--;

}

if (keyboard == 's' ||keyboard == 'S'){

snakey[0]++;

}

if (keyboard == 'a' ||keyboard == 'A'){

snakex[0]--;

}

if (keyboard == 'd' ||keyboard == 'D'){

snakex[0]++;

}

if (keyboard == '0'){

gameover = true;

}

//=========================================

if (powerL==false){

//=============INISIALISASI MAP================

for (int i = 0 ;i<20;i++){

for (int j=0;j<40;j++){

if (i==0||i==19){

map1[i][j] = "-";

}

else if (j==0||j==39){

map1[i][j] = "|";

}

else {

map1[i][j] = " ";

}

}

}

//=============INISIALISASI MAP================

//BADAN IKUT KEPALA

for (int l = panjang;l>0;l--){

snakex[l]=snakex[l-1];

snakey[l]=snakey[l-1];

}

//BADAN IKUT KEPALA

//ngasih badan

for (int m=0;m<=panjang;m++){

map1[snakey[0]][snakex[0]] = "\*";

if(m!=0){

map1[snakey[m]][snakex[m]] = "%";

}

}

//ngasih badan

//ketemu makanan?

for (int u=0;u<5;u++){

if (map1[snakey[0]][snakex[0]]==map1[random\_posy\_makanan[u]][random\_posx\_makanan[u]]){

panjang++;

random\_posx\_makanan[u] = 1+rand()%38;

random\_posy\_makanan[u] = 1+rand()%18;

score = score + 1;

}

}

//ketemu makanan?

map1[powerL\_y][powerL\_x] = 'L';

if (map1[snakey[0]][snakex[0]]==map1[powerL\_y][powerL\_x]){

map1[powerL\_y][powerL\_x] = ' ';

powerL = true ;

}

//=============PRINT MAP================

for (int i=0;i<20;i++){

for (int j=0;j<40;j++){

//========INISIALISASI MAKANAN=======

for (int k=0;k<5;k++){

if (i==random\_posy\_makanan[k]&&j==random\_posx\_makanan[k]){

map1[i][j] = 'o';

}

}

//========INISIALISASI MAKANAN=======

cout << map1[i][j];

}

cout << endl;

}

//=============PRINT MAP================

//pengecekan nabrak tembok

if (snakex[0]==0||snakex[0]==39||snakey[0]==0||snakey[0]==19){

main\_lagi = 'n';

}

//pengecekan nabrak tembok

}

else if (powerL==true){

//=============INISIALISASI MAP================

for (int i = 0 ;i<20;i++){

for (int j=0;j<80;j++){

if (i==0||i==19){

map2[i][j] = "-";

}

else if (j==0||j==79){

map2[i][j] = "|";

}

else {

map2[i][j] = " ";

}

}

}

//=============INISIALISASI MAP================

//BADAN IKUT KEPALA

for (int l = panjang;l>0;l--){

snakex[l]=snakex[l-1];

snakey[l]=snakey[l-1];

}

//BADAN IKUT KEPALA

//ngasih badan

for (int m=0;m<=panjang;m++){

map2[snakey[0]][snakex[0]] = "\*";

if(m!=0){

map2[snakey[m]][snakex[m]] = "%";

}

}

//ngasih badan

//ketemu makanan?

for (int u=0;u<5;u++){

if (map2[snakey[0]][snakex[0]]==map2[random\_posy\_makanan[u]][random\_posx\_makanan[u]]){

panjang++;

random\_posx\_makanan[u] = 1+rand()%38;

random\_posy\_makanan[u] = 1+rand()%18;

score = score + 1;

}

}

//ketemu makanan?

map2[powerL\_y][powerL\_x] = 'L';

if (map2[snakey[0]][snakex[0]]==map2[powerL\_y][powerL\_x]){

powerL = true ;

}

//=============PRINT MAP================

for (int i=0;i<20;i++){

for (int j=0;j<80;j++){

//========INISIALISASI MAKANAN=======

for (int k=0;k<5;k++){

if (i==random\_posy\_makanan[k]&&j==random\_posx\_makanan[k]){

map2[i][j] = 'o';

}

}

//========INISIALISASI MAKANAN=======

cout << map2[i][j];

}

cout << endl;

}

//=============PRINT MAP================

//pengecekan nabrak tembok

if (snakex[0]==0||snakex[0]==39||snakey[0]==0||snakey[0]==19){

main\_lagi = 'n';

}

//pengecekan nabrak tembok

}

Sleep(100);

system("cls");

}

cout << "GAMEOVER!!!" <<endl;

cout << "Panjang maksimal : " << panjang<<endl;

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

cout << "1. " << nama[0] <<" - "<< highscore[0] << endl;

cout << "2. " << nama[1] <<" - "<< highscore[1] << endl;

cout << "3. " << nama[2] <<" - "<< highscore[2] << endl;

cout << "4. " << nama[3] <<" - "<< highscore[3] << endl;

cout << "5. " << nama[4] <<" - "<< highscore[4] << endl;

cout << "Main lagi ? (y/n)"<<endl;

cin >> main\_lagi;

return 0;

}