#include <iostream>

#include <conio.h>

#include <Windows.h>

using namespace std;

int xtail[100], ytail[100];

int nTail;

string name;

bool gameover;

const int width = 140, height = 30;

int x, y, fruitx, fruity, score;

enum edirection { STOP, LEFT, RIGHT, UP, DOWN };

edirection dir;

void setup() {

gameover = false;

dir = STOP;

x = width / 2;

y = height / 2;

fruitx = rand() % width;

fruity = rand() % height;

score = 0;

}

void draw() {

SetConsoleCursorPosition(GetStdHandle(STD\_OUTPUT\_HANDLE), { 0,0 });

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 << name[0];

else if (i == fruity && j == fruitx) cout << "@";

else {

bool print = false;

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

if (xtail[k] == j && ytail[k] == i) {

cout << "0";

print = true;

}

}

if (!print)

cout << " ";

}

if (j == width - 1) cout << "#";

}

cout << endl;

}

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

cout << "#";

}

cout << endl;

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

}

void input() {

if (\_kbhit()) {

switch (\_getch()) {

case 'a':

dir = LEFT;

break;

case 'd':

dir = RIGHT;

break;

case 'w':

dir = UP;

break;

case 's':

dir = DOWN;

break;

case 'x':

gameover = true;

break;

}

}

}

void logic() {

int prevX = xtail[0];

int prevY = ytail[0];

int pre2X, pre2Y;

xtail[0] = x;

ytail[0] = y;

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

pre2X = xtail[i];

pre2Y = ytail[i];

xtail[i] = prevX;

ytail[i] = prevY;

prevX = pre2X;

prevY = pre2Y;

}

switch (dir) {

case LEFT:

x--;

break;

case RIGHT:

x++;

break;

case UP:

y--;

break;

case DOWN:

y++;

break;

}

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

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

if (x == fruitx && y == fruity) {

score += 10;

fruitx = rand() % width;

fruity = rand() % height;

nTail++;

}

for (int t = 1; t < nTail; ++t) {

if (xtail[t] == x && ytail[t] == y) gameover = true;

}

}

void TextColor(int x)

{

HANDLE h = GetStdHandle(STD\_OUTPUT\_HANDLE);

SetConsoleTextAttribute(h, x);

}

int main() {

TextColor(6);

cout << "Your name: ";

cin >> name;

cout << "Hi " << name << endl;

TextColor(5);

Sleep(2000);

setup();

while (!gameover) {

draw();

input();

if (dir == UP || dir == DOWN) {

Sleep(30);

}

logic();

}

}