#define \_CRT\_SECURE\_NO\_WARNINGS

#include <stdio.h>

#include <string.h>

#include <time.h>

#include <stdlib.h>

#include <windows.h>

#ifdef \_WIN32

#define CLEAR\_SCREEN() system("cls")

#else

#define CLEAR\_SCREEN() printf("\x1b[2J");

#endif

#define WHITE 15

#define RED 12

typedef

struct \_warrior {

int lives;

int defence;

int attack;

char name[30];

} Warrior;

typedef

struct \_player {

char name[30];

Warrior army[5];

} Player;

int random(int min, int max) {

return rand() % (max - min + 1) + min;

}

void whitespaces(int length) {

int i;

for (i = 0; i < 100-length; i++)

printf(" ");

}

void color(Warrior warrior) {

HANDLE console;

console = GetStdHandle(STD\_OUTPUT\_HANDLE);

if (warrior.lives==0)

SetConsoleTextAttribute(console, RED);

else

SetConsoleTextAttribute(console, WHITE);

}

void create\_army(Warrior army[5]) {

int i;

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

printf("Zadajte meno bojovnika cislo %d: ", i + 1);

scanf("%s", &army[i].name);

army[i].lives = 5;

here:

army[i].defence = random(1, 10);

army[i].attack = 5 - army[i].defence;

if (army[i].attack == 0 || army[i].defence == 0)

goto here;

}

}

void print\_warrior(Warrior warrior1, Warrior warrior2) {

HANDLE console;

console = GetStdHandle(STD\_OUTPUT\_HANDLE);

color(warrior1);

printf("MENO:%s", warrior1.name);

whitespaces((int)strlen(warrior1.name));

color(warrior2);

printf("MENO:%s\n", warrior2.name);

color(warrior1);

printf("ZIVOTY:%d", warrior1.lives);

whitespaces(3);

color(warrior2);

printf("ZIVOTY:%d\n", warrior2.lives);

color(warrior1);

printf("OBRANA:%d", warrior1.defence);

whitespaces(3);

color(warrior2);

printf("OBRANA:%d\n", warrior2.defence);

color(warrior1);

printf("UTOK:%d", warrior1.attack);

whitespaces(1);

color(warrior2);

printf("UTOK:%d\n\n", warrior2.attack);

SetConsoleTextAttribute(console, WHITE);

}

void print\_army(Warrior army1[5], Warrior army2[5]) {

int i;

printf("ARMADA HRACA 1:");

whitespaces(10);

printf("ARMADA HRACA 2:\n\n");

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

print\_warrior(army1[i], army2[i]);

}

}

int game\_over(Warrior army[5]) {

int i;

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

if (army[i].lives!=0)

return 0;

}

return 1;

}

int find\_warrior(char name[],Warrior army[5]) {

int i;

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

if (strcmp(name,army[i].name)==0)

return i;

}

return -1;

}

int attack(Warrior warriorA, Warrior warriorD, int a, int \*p\_livesA, int \*p\_livesD) {

int DEF, ATT, X,livesA, livesD;

ATT = warriorA.attack;

DEF = warriorD.defence;

livesA = warriorA.lives;

livesD = warriorD.lives;

printf("Suboj %s vs %s\n", warriorA.name, warriorD.name);

printf("Utoci %s\n", warriorA.name);

X = random(1, ATT + DEF);

if (X>DEF) {

printf("Zasah!\n");

printf("Vyhrava %s\n", warriorA.name);

livesD--;

\*p\_livesD = livesD;

return a;

}

else {

printf("Utok bol odrazeny\n");

printf("Vyhrava %s\n", warriorD.name);

livesA--;

\*p\_livesA = livesA;

return 1 - a;

}

}

int can\_choose(char name[], Warrior army[5]) {

if (find\_warrior(name,army) && army[find\_warrior(name, army)].lives>0)

return 1;

return 0;

}

char\* fight(Player players[2]) {

char names[2][30];

int winner;

int i,a,wA\_ind,wD\_ind,round = 0;

a = random(0, 1);

while (!game\_over(players[0].army) && !game\_over(players[1].army)) {

round++;

try\_again:

//v prvom kole vyberaju obaja hraci bojovnikov

if (round == 1) {

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

printf("Hrac %d - Vyberte si hraca: ", i + 1);

scanf("%s", &names[i]);

}

}

//potom len porazeny

else {

printf("Hrac %d - Vyberte si hraca: ", 1-a+1);

scanf("%s", &names[1-a]);

}

//urci sa vytaz aktualneho kola, a = attack = utoci vytaz

wA\_ind = find\_warrior(names[a], players[a].army);

if (wA\_ind == -1 || players[a].army[wA\_ind].lives<=0) {

printf("Hrac %d - toho hraca si vybrat nemozete!\n",a+1);

goto try\_again;

}

wD\_ind = find\_warrior(names[1 - a], players[1 - a].army);

if (wD\_ind == -1 || players[1-a].army[wD\_ind].lives <= 0) {

printf("Hrac %d - toho hraca si vybrat nemozete!\n",1-a+1);

goto try\_again;

}

winner = attack(players[a].army[wA\_ind], players[1-a].army[wD\_ind],a,&players[a].army[wA\_ind].lives, &players[1-a].army[wD\_ind].lives);

a = winner;

Sleep(3000);

CLEAR\_SCREEN();

print\_army(players[0].army, players[1].army);

}

printf("Koniec hry\n");

if (game\_over(players[0].army))

return players[1].name;

return players[0].name;

}

int main() {

Player players[2];

char \*winner;

int i;

srand(time(NULL));

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

printf("Hrac %d - Zadajte meno: ",i+1);

scanf("%s", &players[i].name);

create\_army(players[i].army);

}

CLEAR\_SCREEN();

print\_army(players[0].army,players[1].army);

winner = fight(players);

printf("Vitazom sa stava %s!\n",winner);

return 0;

}