#include <stdio.h>

#include <math.h>

#include <ctype.h>

#include <string.h>

#include <stdlib.h>

#include <unistd.h>

#include <time.h>

//nhap 3 lan ma sai la out

//nhapaj usser thwucj hieenj dudocj nhieu giao dich

//Nh?p tài kho?n IT de out

//chao mung den voi cay atm // nhap so tai khoan va pins truocs khi chon menu

//them 1 cai file de luu so tien giao dich

// cu dang nhap thoat ra la luu giao dich vao 1 cai file moi

char matkhau[100]="happyday";

int count[10000]={0};

int n;

char node[100]="-1";

int sogiaodich=0;

struct taikhoan{

char accountnumber[100];

char PINs[100];

long long accountbalances;

};

typedef struct taikhoan TK;

TK tk[10000];

void menuIT();

void menu(TK tk[], int &n, int count[]);

void nhap(TK &tk) {

printf("\nNhap Account Number:");

gets(tk.accountnumber);

printf ("Nhap ma PINs:");

gets(tk.PINs);

printf ("Nhap Account Balances:");

scanf ("%lld", &tk.accountbalances);

getchar();;

}

void xuat(TK tk) {

printf ("\nAccount Number: %s", tk.accountnumber);

printf ("\nMa PINs: %s", tk.PINs);

printf ("\nAccount Balances: %lld", tk.accountbalances);

}

void nhapds(TK tk[], int &n) {

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

printf ("\nNhap khach hang thu %d:", i);

nhap(tk[i]);

}

}

void xuatds(TK tk[], int &n) {

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

printf ("\nKhach hang thu %d:", i);

xuat(tk[i]);

}

printf ("\n");

}

int xuatvaofile(TK tk[], int &n) {

char namefile[100];

printf ("\nNhap vao duong dan FILE:");

gets(namefile);

FILE \*f;

f=fopen(namefile,"w");

if(f==NULL) {

return 0;

}

fprintf (f,"So luong tai khoan: %d", n);

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

fprintf (f,"\nKhach hang thu: %d", i);

fprintf (f,"\nAccount Number: %s", tk[i].accountnumber);

fprintf (f,"\nMa PINs: %s", tk[i].PINs);

fprintf (f,"\nAccount Balances: %lld\n", tk[i].accountbalances);

}

fclose(f);

return 1;

}

int doctufile(TK tk[]) {

char namefile[100];

printf ("\nNhap vao duong dan FILE:");

gets(namefile);

FILE \*f;

f=fopen(namefile,"r");

if(f==NULL) {

return 0;

}

fscanf (f,"So luong tai khoan: %d", &n);

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

fscanf(f, "\nKhach hang thu: %d", &i);

fscanf(f, "\nAccount Number: %s", &tk[i].accountnumber);

fscanf(f, "\nMa PINs: %s", &tk[i].PINs);

fscanf(f, "\nAccount Balances: %lld", &tk[i].accountbalances);

}

fclose(f);

return 1;

}

int xttka(TK tk[], int n) {

char tmpa[100];

printf ("\nNhap Account Number: ");

gets(tmpa);

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

if (strcmp(tmpa,tk[i].accountnumber)==0) {

return i;

}

}

return -1;

}

int xttkp(TK tk[], int n, int i) {

char tmpp[100];

printf ("\nNhap Ma PINs: ");

gets(tmpp);

if (strcmp(tk[i].PINs,tmpp)==0) {

return 1;

}

return -1;

}

int xacthucmatkhau() {

char mk[100];

printf ("\nNhap mat khau xac thuc:");

gets(mk);

if (strcmp(mk,matkhau)==0) {

return 1;

}

return 0;

}

int menu\_xacthucgiaodich() {

int xacthucgiaodich;

printf ("\n1-Xac nhan giao dich:");

printf ("\n0-Huy giao dich: ");

printf ("\nNhap lua chon cua ban: ");

scanf ("%d", &xacthucgiaodich);

switch(xacthucgiaodich) {

case 1: return 1;

case 0: return 0;

default:

printf ("\nLua chon khong hop le");

return menu\_xacthucgiaodich();

}

}

void menu\_ruttien(TK tk[], int &n, int i) {

int chon\_menuruttien;

printf ("\n\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_WITHDRAW MONEY\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf ("| |\n");

printf ("| |\n");

printf ("| 1- 500,000 2- 1,000,000 |\n");

printf ("| |\n");

printf ("| |\n");

printf ("| 3- 2,000,000 4- 3,000,000 |\n");

printf ("| |\n");

printf ("| |\n");

printf ("| 5- 5,000,000 6- 10,000,000 |\n");

printf ("| |\n");

printf ("| |\n");

printf ("| 0- Huy bo 7- So khac |\n");

printf ("| |\n");

printf ("|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|\n");

printf ("\nNhap lua chon cua ban:");

scanf ("%d", &chon\_menuruttien);

long long temp;

long long sotienrut;

switch(chon\_menuruttien) {

case 1: sotienrut=500000; printf ("\nXac nhan rut 500,000 VND:");break;

case 2: sotienrut=1000000; printf ("\nXac nhan rut 1,000,000 VND:"); break;

case 3: sotienrut=2000000; printf ("\nXac nhan rut 2,000,000 VND:"); break;

case 4: sotienrut=3000000; printf ("\nXac nhan rut 3,000,000 VND:");break;

case 5: sotienrut=500000; printf ("\nXac nhan rut 5,000,000 VND:");break;

case 6: sotienrut=10000000;printf ("\nXac nhan rut 10,000,000 VND:");break;

case 7:

printf("\nSo tien co the rut chinh la boi cua 50000VND");

printf("\nNhan phim 0 de thoat giao dich:");

do {

printf("\nNhap so tien rut (nhap 0 de thoat): ");

scanf("%lld", &sotienrut);

if (sotienrut == 0) {

break;

} else if (sotienrut % 50000 != 0) {

printf("\nSo tien rut chinh la boi cua 50000VND");

}

} while (sotienrut % 50000 != 0);

if (sotienrut!=0) {

printf ("\nXac nhan rut %lld VND:", sotienrut);

}

break;

case 0:

break;

default:

printf ("\n:Lua chon khong hop le:");

}

if (chon\_menuruttien!=0 && sotienrut!=0) {

if (menu\_xacthucgiaodich()==1) {

temp=tk[i].accountbalances;

temp-=sotienrut;

if (temp<0) {

printf ("\nSo du khong du de thuc hien giao dich");

}

else {

tk[i].accountbalances-=sotienrut;

printf("\nSo tien da rut %lld", sotienrut);

printf("\nSo du tai khoan: %lld",tk[i].accountbalances);

++sogiaodich;

FILE \*f;

char namefile[100];

time\_t currentTime= time(NULL);

struct tm \*tm= localtime(&currentTime);

strftime(namefile,sizeof(namefile),"GD %Y-%m-%d.txt", tm);

f=fopen(namefile,"a");

if (f==NULL) {

printf ("\nKhong the mo file!");

exit(1);

}

fprintf (f,"\nGiao dich thu %d:\nLoai giao dich: Rut tien \nSo tai khoan: %s\nSo tien rut: %lld\nSo du tai khoan: %lld\n"

,sogiaodich,tk[i].accountnumber,sotienrut,tk[i].accountbalances);

fclose(f);

}

}

}

sleep(3);

system("cls");

}

void menu\_guitien(TK tk[], int &n, int i) {

int chon\_menuguitien;

printf ("\n\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_SEND MONEY\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf ("| |\n");

printf ("| |\n");

printf ("| 1- 500,000 2- 1,000,000 |\n");

printf ("| |\n");

printf ("| |\n");

printf ("| 3- 2,000,000 4- 3,000,000 |\n");

printf ("| |\n");

printf ("| |\n");

printf ("| 5- 5,000,000 6- 10,000,000 |\n");

printf ("| |\n");

printf ("| |\n");

printf ("| 0- Huy bo 7- So khac |\n");

printf ("| |\n");

printf ("|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|\n");

printf ("\nNhap lua chon cua ban: ");

scanf ("%d", &chon\_menuguitien);

long long temp;

long long sotiengui;

switch(chon\_menuguitien) {

case 1: sotiengui=500000; printf ("\nXac nhan gui vao tai khoan 500,000 VND:"); break;

case 2: sotiengui=1000000; printf ("\nXac nhan gui vao tai khoan 1,000,000 VND:"); break;

case 3: sotiengui=2000000; printf ("\nXac nhan gui vao tai khoan 2,000,000 VND:");break;

case 4: sotiengui=3000000; printf ("\nXac nhan gui vao tai khoan 3,000,000 VND:");break;

case 5: sotiengui=5000000; printf ("\nXac nhan gui vao tai khoan 5,000,000 VND:"); break;

case 6: sotiengui=10000000; printf ("\nXac nhan gui vao tai khoan 10,000,000 VND:");break;

case 7:

printf("\nSo tien co the gui chinh la boi cua 50000VND");

do {

printf("\nNhap so tien gui (nhap 0 de thoat): ");

scanf("%lld", &sotiengui);

if (sotiengui == 0) {

break;

} else if (sotiengui % 50000 != 0) {

printf("\nSo tien gui chinh la boi cua 50000VND");

}

} while (sotiengui % 50000 != 0);

if (sotiengui!=0) {

printf ("\nXac nhan gui vao tai khoan %lld VND:", sotiengui);break;

}

break;

case 0:

break;

default:

printf ("\n:Lua chon khong hop le:");

}

if (chon\_menuguitien!=0 && sotiengui!=0) {

if (menu\_xacthucgiaodich()==1) {

tk[i].accountbalances+=sotiengui;

printf("\nSo tien da gui %lld", sotiengui);

printf("\nSo du tai khoan: %lld",tk[i].accountbalances);

++sogiaodich;

FILE \*f;

char namefile[100];

time\_t currentTime= time(NULL);

struct tm \*tm= localtime(&currentTime);

strftime(namefile,sizeof(namefile),"GD %Y-%m-%d.txt", tm);

f=fopen(namefile,"a");

if (f==NULL) {

printf ("\nKhong the mo file!");

exit(1);

}

fprintf (f,"\nGiao dich thu %d:\nLoai giao dich: Gui tien \nSo tai khoan: %s\nSo tien gui: %lld\nSo du tai khoan: %lld\n"

,sogiaodich,tk[i].accountnumber,sotiengui,tk[i].accountbalances);

fclose(f);

}

}

sleep(3);

system("cls");

}

void xemtaikhoan(TK tk[], int &n, int i) {

printf ("\nSo du tai khoan: %lld (Nhan phim 0 de thoat):", tk[i].accountbalances);

++sogiaodich;

FILE \*f;

char namefile[100];

time\_t currentTime= time(NULL);

struct tm \*tm= localtime(&currentTime);

strftime(namefile,sizeof(namefile),"GD %Y-%m-%d.txt", tm);

f=fopen(namefile,"a");

if (f==NULL) {

printf ("\nKhong the mo file!");

exit(1);

}

fprintf (f,"\nGiao dich thu %d:\nLoai giao dich: Xem tai khoan \nSo tai khoan: %s\nSo du tai khoan: %lld\n"

,sogiaodich,tk[i].accountnumber,tk[i].accountbalances);

fclose(f);

int chon\_xemtaikhoan;

scanf ("%d", &chon\_xemtaikhoan);

while (chon\_xemtaikhoan !=0) {

printf ("\nNhap phim 0 de thoat! ");

scanf ("%d", &chon\_xemtaikhoan);

}

}

void changematkhau() {

FILE \*f;

// char namefile[100];

// printf ("\nNhap vao duong dan FILE:");

// scanf ("%s", namefile);

printf ("\nNhap mat khau can thay doi:");

scanf ("%s", matkhau);

char namefile[100]="matkhauxacthuc.txt";

f=fopen(namefile,"w");

if(f==NULL) {

printf ("\nKhong the mo FILE de ghi mat khau:");

return;

}

fprintf(f,"Mat khau de mo khoa: %s", matkhau);

fclose(f);

}

void docmatkhautufile() {

FILE \*f;

char namefile[100]="matkhauxacthuc.txt";

f=fopen(namefile,"r");

if (f==NULL) {

printf ("\nKhong the mo FILE de doc mat khau:");

return;

}

fscanf (f,"Mat khau de mo khoa: %s", &matkhau);

fclose(f);

}

int chon\_menuIT;

void menuIT() {

printf ("\n");

printf ("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf ("| |\n");

printf ("| |\n");

printf ("| |\n");

printf ("| |\n");

printf ("| |\n");

printf ("| . . . . . . . . . . . . . . . . . . . . |\n");

printf ("| . . . . |\n");

printf ("| . 1-CHANGE UNLOCK . . 2-FINISH THE . |\n");

printf ("| . PASSWORD . . WORK . |\n");

printf ("| . . . . . . . . . . . . . . . . . . . . |\n");

printf ("| |\n");

printf ("| |\n");

printf ("| |\n");

printf ("| |\n");

printf ("|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|\n");

printf ("\nNhap lua chon cua ban:");

scanf ("%d", &chon\_menuIT);

switch(chon\_menuIT) {

case 1:

changematkhau();

printf ("Luu mat khau moi thanh cong!\n");

sleep(2);

system("cls");

break;

case 2:

sleep(2);

system("cls");

getchar();

break;

default: printf ("\nLua chon khong hop le:");

sleep(2);

system("cls");

menuIT();

}

}

void menu(TK tk[], int &n, int count[]) {

printf ("\n\n");

printf ("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ M E N U \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf ("| | \n");

printf ("| | \n");

printf ("| . . . . . . . . . . . . . . . . . . . . . . | \n");

printf ("| . . . . | \n");

printf ("| . 1-SEND MONEY . . 2\_WITHDRAW MONEY . | \n");

printf ("| . . . . | \n");

printf ("| . . . . . . . . . . . . . . . . . . . . . . | \n");

printf ("| | \n");

printf ("| . . . . . . . . . . . | \n");

printf ("| . . | \n");

printf ("| . 3-VIEW ACCOUNT . | \n");

printf ("| . . | \n");

printf ("| . . . . . . . . . . . | \n");

printf ("| | \n");

printf ("|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|\n");

printf ("\nNhap lua chon:");

scanf ("%s", node);

getchar();

int chiso;

if (strcmp(node,"1")==0) {

chiso=xttka(tk,n);

if (chiso==-1) {

printf ("\nNhap sai Account Number!");

sleep(3);

system("cls");

return;

}

printf ("Nhap Account number chinh xac!\n");

int checkpins=xttkp(tk,n,chiso);

if (checkpins==-1) {

printf ("\nNhap sai ma PINs: ");

sleep(3);

system("cls");

return;

}

printf ("Nhap ma PINs chinh xac!\n");

sleep(3);

system("cls");

if (count[chiso]<=10) {

menu\_guitien(tk,n,chiso);

++count[chiso];

} else {

printf ("\nSo lan giao dich trong ngay da vuot qua 10 lan!!!");

sleep(3);

system("cls");

return;

}

}

else if(strcmp(node,"2")==0) {

chiso=xttka(tk,n);

if (chiso==-1) {

printf ("\nNhap sai Account Number!");

sleep(3);

system("cls");

return;

}

printf ("Nhap Account number chinh xac!\n");

int checkpins=xttkp(tk,n,chiso);

if (checkpins==-1) {

printf ("\nNhap sai ma PINs: ");

sleep(3);

system("cls");

return;

}

printf ("Nhap ma PINs chinh xac!\n");

sleep(2);

system("cls");

if (count[chiso]<=10) {

menu\_ruttien(tk,n,chiso);

++count[chiso];

} else {

printf ("\nSo lan giao dich trong ngay da vuot qua 10 lan!!!");

sleep(3);

system("cls");

return;

}

}

else if(strcmp(node,"3")==0) {

chiso=xttka(tk,n);

if (chiso==-1) {

printf ("\nNhap sai Account Number!");

sleep(3);

system("cls");

return;

}

printf ("Nhap Account number chinh xac!\n");

int checkpins=xttkp(tk,n,chiso);

if (checkpins==-1) {

printf ("\nNhap sai ma PINs! ");

sleep(3);

system("cls");

return;

}

printf ("Nhap ma PINs chinh xac!\n");

sleep(3);

system("cls");

if (count[chiso]<=10) {

xemtaikhoan(tk,n,chiso);

++count[chiso];

sleep(2);

system("cls");

} else {

printf ("\nSo lan giao dich trong ngay da vuot qua 10 lan!!!");

sleep(3);

system("cls");

return;

}

}

else if (strcmp(node,matkhau)==0) {

sleep(3);

system("cls");

menuIT();

}

else {

printf ("\nNhap lua chon khong chinh xac!");

sleep(2);

system("cls");

}

}

int main () {

docmatkhautufile();

while (1) {

if (xacthucmatkhau()) {

printf ("Xac thuc mat khau thanh cong!");

printf ("\n\nBat dau doc thong tin nguoi dung: ");

while (1) {

if (doctufile(tk)) {

printf ("Doc du lieu tu file thanh cong!");

sleep(2);

system("cls");

break;

}

else {

printf ("\nNhap duong dan file khong chinh xac:");

}

}

break;

}

else {

printf("\nMat khau xac thuc khong chinh xac:");

}

}

do{

menu(tk,n,count);

} while (chon\_menuIT!=2);

while (1) {

if (xacthucmatkhau()) {

printf ("Xac thuc mat khau thanh cong!");

printf ("\n\nBat dau luu tru thong tin nguoi dung: ");

while (1) {

if (xuatvaofile(tk,n)) {

printf ("Xuat du lieu vao file thanh cong:");

break;

}

else {

printf ("\nNhap duong dan file khong chinh xac:");

}

}

break;

}

else {

printf("\nMat khau xac thuc khong chinh xac:");

}

}

return 0;

}

// Neu nhu code khong thoat vong lap rut tien hay gui tien thi van có the rut qua 10 l?n

/\* changematkhau();

printf ("Nhap n:");

scanf ("%d", &n);

getchar();

nhapds(tk,n);

xuatvaofile(tk,n);\*/

//-file dau ra

//+file in ra tat ca cac giao dich

//+file luu lai thong tin khach hang

//+file luu lai mat khau

//-file dau vao

//+file doc mat khau

//+file doc cac thong tin khach hang

//ten khach hang