#include <stdio.h>

#include <math.h>

#include <ctype.h>

#include <string.h>

#include <stdlib.h>

char matkhau[100]="happyday";

int count[10000]={0};

int n;

char node[100]="-1";

int chon;

struct taikhoan{

long long accountnumber, PINs, accountbalances;

};

typedef struct taikhoan TK;

TK tk[10000];

void nhap(TK &tk) {

printf("\nNhap Account Number:");

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

printf ("Nhap ma PINs:");

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

printf ("Nhap Account Balances:");

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

}

void xuat(TK tk) {

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

printf ("\nMa PINs: %lld", 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:");

scanf ("%s", 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: %lld", tk[i].accountnumber);

fprintf (f,"\nMa PINs: %lld", 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:");

scanf ("%s", 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: %lld", &tk[i].accountnumber);

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

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

}

fclose(f);

return 1;

}

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

long long tmpa;

printf ("\nNhap Account Number:");

scanf ("%lld", &tmpa);

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

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

return i;

}

}

return 0;

}

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

long long tmpp;

printf ("\nNhap Ma PINs:");

scanf ("%lld", &tmpp);

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

return 1;

}

return 0;

}

int xacthucmatkhau() {

char mk[100];

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

gets(mk);

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

return 1;

}

return 0;

}

long long sotien;

void checkruttien(TK tk[], int &n, int i, long long &sotien) {

while (sotien>tk[i].accountbalances || sotien <50000) {

if (sotien>tk[i].accountbalances) {

printf ("So du khong du de thuc hien giao dich:\n");

}

if (sotien<50000) {

printf ("Han muc toi thieu co the rut la 50000:\n");

}

printf ("\nNhap so tien can rut:");

scanf ("%lld", &sotien);

}

}

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

if (tk[i].accountbalances<=51000) {

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

return;

}

printf ("\nNhap so tien can rut:");

scanf ("%lld", &sotien);

checkruttien(tk,n,i,sotien);

long long sotientmp;

sotientmp=tk[i].accountbalances-sotien;

while (sotientmp<50000) {

printf ("Han muc toi thieu cua the la 50000:\n");

printf("\nNhap so tien can rut:");

scanf ("%lld",&sotien);

checkruttien(tk,n,i,sotien);

sotientmp=tk[i].accountbalances-sotien;

}

tk[i].accountbalances=sotientmp;

printf ("\nSo tien ban da rut la: %lld\nSo du tai khoan la: %lld",sotien, tk[i].accountbalances);

}

long long sotiengui;

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

printf ("\nNhap so tien can gui:");

scanf ("%lld", &sotiengui);

while (sotiengui<50000 || sotiengui>1000000000) {

if (sotiengui<50000) {

printf ("\nHan muc toi thieu co the nap vao la: 50000");

printf ("\nNhap so tien can gui:");

scanf ("%lld", &sotiengui);

}

if (sotiengui>1000000000) {

printf ("\nHan muc toi da co the nap vao the la: 1000000000");

printf ("\nNhap so tien can gui:");

scanf ("%lld", &sotiengui);

}

}

tk[i].accountbalances+=sotiengui;

printf ("\nSo tien ban da nap vao la: %lld", sotiengui);

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

}

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

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

}

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);

}

void menuIT() {

printf ("\n\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*\n");

printf ("\* \*\n");

printf ("\* 1-Thay doi mat khau mo khoa: \*\n");

printf ("\* 2-Ket thuc ngay lam viec: \*\n");

printf ("\* \*\n");

printf ("\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*\n");

printf ("\nNhap lua chon:");

scanf ("%d", &chon);

switch(chon) {

case 1:

changematkhau();

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

break;

case 2:

getchar();

break;

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

menuIT();

}

}

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

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

printf ("\* \*\n");

printf ("\* 1-Gui tien: \*\n");

printf ("\* 2-Rut tien: \*\n");

printf ("\* 3-Xem tai khoan: \*\n");

printf ("\* \*\n");

printf ("\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*\n");

printf ("\nNhap lua chon:");

scanf ("%s", node);

int chiso;

int countw1=0;int countw2=0;

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

chiso=xttka(tk,n);

while (chiso==0) {

printf ("Nhap sai Account Number!\n");

++countw1;

if (countw1==3) {

printf("\nNhap sai qua 3 lan!!!\n");

return;

}

chiso=xttka(tk,n);

}

while (xttkp(tk,n,chiso)==0) {

printf ("Nhap sai ma PINs!\n");

++countw2;

if (countw2==3) {

printf("\nNhap sai qua 3 lan!!!\n");

++count[chiso];

return;

}

}

++count[chiso];

if (count[chiso]==5) {

printf ("\nVuot qua so lan giao dich trong ngay la 5!");

return;

}

else {

guitien(tk,n,chiso);

}

return;

}

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

chiso=xttka(tk,n);

while (chiso== 0) {

printf ("Nhap sai Account Number!\n");

++countw1;

if (countw1==3) {

printf("\nNhap sai qua 3 lan!!!\n");

return;

}

chiso=xttka(tk,n);

}

while (xttkp(tk,n,chiso)==0) {

printf ("Nhap sai ma PINs!\n");

++countw2;

if (countw2==3) {

printf("\nNhap sai qua 3 lan!!!\n");

++count[chiso];

return;

}

}

++count[chiso];

if (count[chiso]==5) {

printf ("\nVuot qua so lan giao dich trong ngay la 5!");

return;

}

else {

ruttien(tk,n,chiso);

}

return;

}

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

chiso=xttka(tk,n);

while (chiso== 0) {

printf ("Nhap sai Account Number!\n");

++countw1;

if (countw1==3) {

printf("\nNhap sai qua 3 lan!!!\n");

return;

}

chiso=xttka(tk,n);

}

while (xttkp(tk,n,chiso)==0) {

printf ("Nhap sai ma PINs!\n\n");

++countw2;

if (countw2==3) {

printf("\nNhap sai qua 3 lan!!!\n");

++count[chiso];

return;

}

}

++count[chiso];

if (count[chiso]==5) {

printf ("\nVuot qua so lan giao dich trong ngay la 5!");

return;

}

else {

xemtaikhoan(tk,n,chiso);

}

return;

}

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

menuIT();

}

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

return;

}

int main () {

docmatkhautufile();

while (1) {

if (xacthucmatkhau()) {

printf ("Mat khau xac thuc chinh xac:\n");

printf ("\nThuc hien lay thong tin danh sach khach hang:");

while (1){

if (doctufile(tk)) {

printf ("Doc du lieu tu FILE thanh cong:\n");

break;

}

else {

printf ("Nhap duong dan FILE khong chinh xac!\n");

}

}

break;

}

else {

printf ("Mat khau xac thuc khong chinh xac!\n");

}

}

while (chon!=2) {

menu(tk,n,count);

}

while (1) {

if (xacthucmatkhau()) {

printf ("Mat khau xac thuc chinh xac:\n");

printf ("\nThuc hien luu thong tin danh sach khach hang:");

while (1){

if (xuatvaofile(tk,n)) {

printf ("Luu du lieu vao FILE thanh cong:\n");

return 0;

}

else {

printf ("Nhap duong dan FILE khong chinh xac!\n");

}

}

}

else {

printf ("Mat khau xac thuc khong chinh xac!\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

return 0;

}