#include<stdio.h>

#include<stdlib.h>

#include<string.h>

#include<ctype.h>

const int PROJECT\_PASS=786;

struct accounts{

char name[40];

char fath\_name[40];

char moth\_name[40];

char last\_name[40];

char address[100];

int age;

int acc\_pass;

int ATM\_pin;

long long int balance;

long long int fd;

long long int pay\_due;

};

struct accounts look[10]={

{"Rajesh","Ramesh","Kumari","Menon","105 Shanti nagar Bangalore",32,9899,7865,10000,1200000,0},

{"Shankar","Rahul","Shivani","Kumar","Samatanagar Bangalore",23,6543,8765,11000,1100000,0},

{"Mohommed","Javed","Sana","Shaik","Opposite Apollo Hospital Bangalore",45,6432,1232,7000,700000,0},

{"Rakesh","Roshan","Geeta","Singh","Gokul Society 115 Bangalore",29,8876,8754,8000,1300000,0},

};

void new\_account(int i);

void project\_password(void);

int exist\_account(int m);

void ATM(int y);

void loan(int g);

void fixed\_depo(int r);

void accountinfo(int t);

int main(void)

{

project\_password();

int n=4,b,opt1;

char ch;

printf("\t\tPlease choose from the following\n");

printf("\t\t1.New Account\t\t2.Existing Account\n\t\t3.Account Info\t\t4.(Q to quit)\n");

while(scanf("%d",&opt1)==1)

{

switch(opt1){

case(1): new\_account(n);

n++;

break;

case(2): b=exist\_account(n);

break;

case(3): accountinfo(b);

break;

default : printf("Choose a valid option\n");

break;

}

printf("\n\t\tPlease choose from the following\n");

printf("\t\t1.New Account\t2.Existing Account\n\t\t3.Account Info\t4.(Q to quit)\n");

getchar();

}

}

void project\_password(void)

{

int pass;

int i=0;

printf("\n\n\n\n\n\n\n\n\t\t\t");

while(i<50)

{

printf("-");

i++;

}

printf("\n");

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

printf("\t\t\t|\t\*WELCOME TO STATE BANK OF BIT\*\t\t |\n");

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

printf("\t\t\t|\t\*-Please enter password to continue-\*\t |\n");

printf("\t\t\t|\t\t");

while((scanf("%d",&pass))==1)

{

int i=0;

if(pass==PROJECT\_PASS)

{

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

printf("\t\t\t");

while(i++<50)

putchar('-');

break;

}

else

{

printf("\t\t\t|\tPlease type a valid password\t\t | \n");

printf("\t\t\t|\t\t");

continue;

}

}

getchar();

getchar();

system("cls");

return;

}

void new\_account(int i)

{

getchar();

int k=0;

printf("Please type your name:");

gets(look[i].name);

printf("\nPlease type your father\'s name:");

gets(look[i].fath\_name);

printf("\nPlease type your mother\'s name:");

gets(look[i].moth\_name);

printf("\nPlease type your last name:");

gets(look[i].last\_name);

printf("\nPlease type your adress:");

gets(look[i].address);

printf("\nPlease type your age:");

scanf("%d",&look[i].age);

printf("\nPlease set an account password:");

scanf("%d",&look[i].acc\_pass);

printf("\nPlease set an ATM pin: ");

scanf("%d",&look[i].ATM\_pin);

printf("\nPlease deposit some amount of money: ");

while(scanf("%ld",&look[i].balance)==1)

{

if((look[i].balance)<=5000)

printf("\nPlease deposit above $5000");

else

break;

}

printf("\nPlease deposit FD amount (0 to quit)");

scanf("%lld",&look[i].fd);

printf("\nACCOUNT CREATED!!!");

}

int exist\_account(int m)

{

getchar();

char usern[40];

int u=0,pass,found,ch;

printf("\nPlease type your username:");

gets(usern);

while(u<m)

{

if((strcmp(usern,look[u].name))!=0)

{

u++;

found=0;

}

else

{

printf("\nPASSWORD:");

found=1;

while((scanf("%d",&pass))==1)

{

if(pass!=look[u].acc\_pass)

{

printf("\nPlease type a valid account password");

continue;

}

else

break;

}

break;

}

}

if(found==0)

{

printf("\nAccount was not found\n");

exit(0);

}

printf("\nPlease provide an option to choose from\n");

printf("1.Loan\t2.FD\t3.ATM\t'4.q' to quiut\n");

while((scanf("%d",&ch))==1)

{

switch(ch)

{

case(1): loan(u);

break;

case(2): fixed\_depo(u);

break;

case(3): ATM(u);

break;

}

printf("\nPlease provide an option to choose from\n");

printf("1.Loan\t2.FD\t3.ATM\t'4.q' to quiut\n");

}

return u;

}

void ATM(int y)

{

long int num;

int pin,opt;

char ch,c;

printf("Type your ATM pin:");

scanf("%d",&pin);

if(pin!=look[y].ATM\_pin)

{

printf("\nIncorrect password!!!\n");

exit(0);

}

printf("\nChoose from options below:\n");

printf("1.Deposit\t2.Withdraw\t3. Change ATM pin\t4.Balance Enquiry(q to quit)");

while((scanf("%d",&opt))==1)

{

switch(opt)

{

case(1):printf("\nType the amount you want to deposit\n");

scanf("%d",&num);

if(num>10000)

break;

look[y].balance+=num;

break;

case(2):printf("\nType the amount you want to withdraw\n");

scanf("%d",&num);

if(num>5000)

break;

look[y].balance-=num;

break;

case(3):printf("\nType your new pin\n");

scanf("%d",&look[y].ATM\_pin);

break;

case(4):printf("\nBalance:%d",look[y].balance);

break;

default :printf("\nChoose valid option\n");

break;

}

printf("\nChoose from options below:\n");

printf("1.Deposit\t2.Withdraw\t3. Change ATM pin\t4.Balance Enquiry(q to quit)");

}

}

void loan(int g)

{

long long int erase;

long long int loan\_amt;

printf("\nHow much loan do you want\n");

scanf("%lld",&loan\_amt);

if(loan\_amt>look[g].fd)

{

printf("Loan greater than FD amount-not possible\n");

return;

}

printf("\nOur bank has interest rate of 12percent per anum:");

look[g].pay\_due=loan\_amt+(0.12\*loan\_amt);

printf("\nYou have to pay %.3f per month\n",(loan\_amt\*0.12)/12);

printf("\n Type amount if you want to erase some part of loan now 0 to exit\n");

scanf("%d",&erase);

look[g].pay\_due-=erase;

return;

}

void fixed\_depo(int r)

{

int k;

int u;

long long int result,tnk;

printf("Type the time in year of fixed deposit\n");

scanf("%d",&k);

printf("Type in the current year of fixed deposit\n");

scanf("%d",&u);

tnk=look[r].fd;

while(u<k)

{

look[r].fd+=((10-u)/10)\*look[r].fd;

u++;

}

result=look[r].fd;

look[r].fd=tnk;

printf("\nYou will get %lld at the end of your term\n",result);

}

void accountinfo(int t)

{

getchar();

printf("Name:%s\n\nFathers name:%s\n\nMothers Name:%s\n\nAddress:%s\nBalance:%lld\nFD:%lld\nLoan Due Payment:%lld\n",look[t].name,look[t].fath\_name,

look[t].moth\_name,look[t].address,look[t].balance,look[t].fd,look[t].pay\_due);

return;

}