import java.util.\*;

import java.io.File;

import java.io.\*;

import java.io.FileWriter;

abstract class Welcome

{

public abstract void greet1();

public abstract void greet2();

public abstract void about();

}

class Customer implements CI

{

public double loani,loan,P,v,qw;

public double amount,intr,r,t,pro;

Scanner s=new Scanner(System.in);

void viewshare()

{

try {

File myObj = new File("filename.txt");

Scanner myReader = new Scanner(myObj);

while (myReader.hasNextLine()) {

String data = myReader.nextLine();

System.out.println(data);

}

myReader.close();

} catch (FileNotFoundException e) {

System.out.println("An error occurred.");

e.printStackTrace();

}

}

void calculator()

{

System.out.println("Enter 1 to calculate Present Value");

System.out.println("Enter 2 to calculate Future Value");

int i;

i=s.nextInt();

switch(i)

{

case 1:

class PV

{

Scanner s=new Scanner(System.in);

double pv,fv,r,t;

void pvi()

{

System.out.println("Enter the Future value value of your Money");

fv=s.nextDouble();

System.out.println("Enter the value of intrest rate");

r=s.nextDouble();

System.out.println("Enter the no. of period u want put the money away ");

t=s.nextDouble();

}

void pvo()

{

pv=fv/(Math.pow((1+r/100),t));

System.out.println("Future value is="+pv);

}

}

PV p1=new PV();

p1.pvi();

p1.pvo();

break;

case 2:

class FV extends PV

{

double pv,fv,r,t;

Scanner s=new Scanner(System.in);

void fvi()

{

System.out.println("Enter the Present value value of your Money");

pv=s.nextDouble();

System.out.println("Enter the value of intrest rate");

r=s.nextDouble();

System.out.println("Enter the no. of period u want put the money away ");

t=s.nextDouble();

}

void fvo()

{

fv=pv\*(Math.pow((1+r/100),t));

System.out.println("Future value is="+fv);

}

}

FV f1=new FV();

f1.fvi();

f1.fvo();

break;

default:

System.out.println("nothing is selected");

}

}

void advisor()

{

System.out.println("how much do u want to invest");

P=s.nextDouble();

System.out.println("\n Enter your saving amount");

double saving=s.nextDouble();

System.out.println("\n You have to take load of amount");

double loan=P-saving;

this.loan=loan;

System.out.println("loan"+loan);

}

void pl()

{

class Profits extends FV

{

void prof()

{

pro=fv-amount;

System.out.println("Total profit is: ="+pro);

}

}

Profits p5=new Profits();

p5.prof();

}

public void cii()

{

System.out.println("enter the loan amount");

qw=s.nextDouble();

System.out.println("Enter rate of intrest");

r=s.nextDouble();

System.out.println("Enter time in years");

t=s.nextDouble();

}

public void cio()

{

loani=qw\*(Math.pow((r/100),t));

amount=amount+intr;

System.out.println("Compound Intrest is"+loani);

System.out.println("\nTotal Amount is"+amount);

}

}

class Administration extends Customer

{

double tax,pv,fv;

void deatil()

{

class Inventary

{

int c;

Scanner s=new Scanner(System.in);

void detail()

{

do

{

System.out.println("Enter your choice"+"\n Press 1) Adding new prodects"+"\n Press 2) For viewing Products Prices"+"\n Press 3) For Deleting the Product detail content");

int i;

i=s.nextInt();

switch(i)

{

case 1:

try {

FileWriter myWriter = new FileWriter("filename.txt");

myWriter.write("Please go manually and add products deatil directly by scrapping data onlinr from share market websites");

myWriter.close();

System.out.println("Successfully wrote to the file.");

} catch (IOException e) {

System.out.println("An error occurred.");

}

break;

case 2:

try {

File myObj = new File("filename.txt");

Scanner myReader = new Scanner(myObj);

while (myReader.hasNextLine()) {

String data = myReader.nextLine();

System.out.println(data);

}

myReader.close();

} catch (FileNotFoundException e) {

System.out.println("An error occurred.");

}

break;

case 3:

File myObj = new File("filename.txt");

if (myObj.delete()) {

System.out.println("Deleted the file: " + myObj.getName());

} else {

System.out.println("Failed to delete the file.");

}

break;

default:

System.out.println("Nothing is selected");

System.out.println("Try agian"+"File is created");

try {

File myObj2 = new File("filename.txt");

if (myObj2.createNewFile()) {

System.out.println("File created: " + myObj2.getName());

} else {

System.out.println("File already exists.");

}

} catch (IOException e) {

System.out.println("An error occurred.");

}

}

System.out.println("U want to meanu again");

System.out.println("Press 0 to show the meanu again");

c=s.nextInt();

}

while(c==0);//if it is Y then do will run again and if it is other then Y then loop will terminate.

}

}

Inventary inv=new Inventary();

inv.detail();

}

void calculator()

{

System.out.println("Enter 1 to calculate Present Value");

System.out.println("Enter 2 to calculate Future Value");

int i;

i=s.nextInt();

switch(i)

{

case 1:

class PV

{

Scanner s=new Scanner(System.in);

double pv,fv,r,t;

void pvi()

{

System.out.println("Enter the Future value value of your Money");

fv=s.nextDouble();

System.out.println("Enter the value of intrest rate");

r=s.nextDouble();

System.out.println("Enter the no. of period u want put the money away ");

t=s.nextDouble();

}

void pvo()

{

pv=fv/(Math.pow((1+r/100),t));

System.out.println("Future value is="+pv);

}

}

PV p2=new PV();

p2.pvi();

p2.pvo();

break;

case 2:

class FV extends PV

{

double r,t;

Scanner s=new Scanner(System.in);

void fvi()

{

System.out.println("Enter the Present value value of your Money");

pv=s.nextDouble();

System.out.println("Enter the value of intrest rate");

r=s.nextDouble();

System.out.println("Enter the no. of period u want put the money away ");

t=s.nextDouble();

}

void fvo()

{

fv=pv\*(Math.pow((1+r/100),t));

v=fv-pv;

System.out.println("Future value is="+fv);

System.out.println("Total profit is="+v+"\n");

}

}

FV f2=new FV();

f2.fvi();

f2.fvo();

break;

default:

System.out.println("nothing is selected");

}

}

void taxes()

{

tax=loani+v;

class SI extends FV

{

Scanner s=new Scanner(System.in);

double intr,r,t,P;

double amount=0;

void sii()

{

System.out.println("Enter the total profit");

P=s.nextDouble();

System.out.println("Enter rate of intrest");

r=s.nextDouble();

System.out.println("Enter time in years");

t=s.nextDouble();

intr=(P\*r\*t)/100;

amount=amount+intr;

System.out.println("Tax is:"+intr);

System.out.println("\nTotal Profit is"+tax);

}

}

SI s1=new SI();

s1.sii();

}

}

interface CI

{

public void cii();

public void cio();

}

class Greeting extends Welcome

{

public void greet1()

{

System.out.println("Welcome to Vaibhav's World!");

}

public void greet2()

{

System.out.println("Good Bye!");

System.out.println("Thank you for visiting!");

}

public void about()

{

System.out.println("Name:Vaibhav Kuamr");

System.out.println("Section:K18RD");

System.out.println("Roll No.:08");

}

}

class CA extends Greeting

{

public static void main(String args[])

{

CA k=new CA();

k.greet1();

int n;

int c;

Scanner s=new Scanner(System.in);

System.out.println("Enter your choice:"+"\n Press: \n 1)For Customer \n 2)For Administration"+"\n");

n=s.nextInt();

do

{

switch(n)

{

case 1:

s.nextLine();

System.out.println("Enter your User Name ");

String username = s.nextLine();

s.nextLine();

System.out.println("Enter your Password ");

String password = s.nextLine();

s.nextLine();

if(username.equals("user") && password.equals("user"))

{

int i;

System.out.println("Authentication Successful");

System.out.println("press '1' for view Shares");

System.out.println("press '2' for advisor");

System.out.println("press '3' for Time of value of Money calculator");

System.out.println("press '4' to calculate profit and loss");

i=s.nextInt();

Customer cus=new Customer();

switch(i)

{

case 1:

cus.viewshare();

break;

case 2:

cus.advisor();

break;

case 3:

cus.calculator();

break;

case 4:

cus.cii();

cus.cio();

cus.pl();

default:

System.out.println("nothing is selected");

}

break;

}

else

{

System.out.println("Authentication Failed");

}

break;

case 2:

s.nextLine();

System.out.println("Enter your User Name ");

String username\_a = s.nextLine();

s.nextLine();

System.out.println("Enter your Password ");

String password\_a = s.nextLine();

s.nextLine();

if(username\_a.equals("admin") && password\_a.equals("admin"))

{

System.out.println("Authentication Successful");

System.out.println("press '1' for Shares");

System.out.println("press '2' for Time of value of Money calculator");

System.out.println("press '3' for Taxes");

int i=s.nextInt();

Administration ad=new Administration();

switch(i)

{

case 1:

ad.deatil();

break;

case 2:

ad.calculator();

break;

case 3:

ad.taxes();

break;

default:

System.out.println("nothing is selected");

}

break;

}

else

{

System.out.println("Authentication Failed");

}

break;

default:

System.out.println("Nothing is selected");

}

System.out.println("U want to meanu again");

System.out.println("Press 0 to show the meanu again");

c=s.nextInt();

}

while(c==0);//if it is Y then do will run again and if it is other then Y then loop will terminate.

k.greet2();

k.about();

}

}





