

```
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 interest");
        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 Interest is"+loani);
        System.out.println("\nTotal Amount is"+amount);

    }
}

class Administration extends Customer
{
    double tax,pv,fv;
    void deatil()
    {
        class Inventory
        {
            int c;

            Scanner s=new Scanner(System.in);

```

```

void detail()
{
    do
    {

        System.out.println("Enter your choice"+"\\n Press 1) Adding new
products"+"\\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 again"+"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.
}
}

Inventory inv=new Inventory();
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();
```

```
password.equals("user")) if(username.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();
```

```
}
```

```
}
```

C:\Users\Vaibhav\Documents\LPU JAVA>javac Project.java

C:\Users\Vaibhav\Documents\LPU JAVA>java CA

Welcome to Vaibhav's World!

Enter your choice:

Press:

1)For Customer

2)For Administration

1

Enter your User Name

User

Enter your Password

User

Authentication Successful

press '1' for view Shares

press '2' for advisor

press '3' for Time of value of Money calculator

press '4' to calculate profit and loss

1

JSWSTEEL	JSW Steel Limited	P1	JSW Steel Limited	2.5	2.5	1	23-Mar-05	15-Dec-17	2.5	INE019A04016
JSWSTEEL	JSW Steel Limited	P1	JSW Steel Limited	2.5	2.5	1	23-Mar-05	15-Mar-18	2.5	INE019A04016
JSWSTEEL	JSW Steel Limited	P1	JSW Steel Limited	2.5	2.5	1	23-Mar-05	15-Jun-18	2.5	INE019A04016
JSWSTEEL	JSW Steel Limited	P1	JSW Steel Limited	2.5	2.5	1	23-Mar-05	15-Sep-18	2.5	INE019A04016

U want to meanu again

Press 0 to show the meanu again

Command Prompt - java CA

```
Authentication Successful
press '1' for view Shares
press '2' for advisor
press '3' for Time of value of Money calculator
press '4' to calculate profit and loss
2
How much do u want to invest
56450
Enter your saving amount
49750
You have to take load of amount
loan6700.0
U want to meanu again
Press 0 to show the meanu again
```

Type here to search

Command Prompt - java CA

```
U want to meanu again
Press 0 to show the meanu again
0
Enter your User Name
user
Enter your Password
user
Authentication Successful
press '1' for view Shares
press '2' for advisor
press '3' for Time of value of Money calculator
press '4' to calculate profit and loss
3
Enter 1 to calculate Present Value
Enter 2 to calculate Future Value
1
Enter the Future value value of your Money
75645
Enter the value of intrtest rate
5.245
Enter the no. of period u want put the money away
2.89
Future value is=65255.627743069206
U want to meanu again
Press 0 to show the meanu again
```

Type here to search

10:41 PM
14-04-2020

Command Prompt - java CA

```
Enter 1 to calculate Present Value
Enter 2 to calculate Future Value
1
Enter the Future value value of your Money
75645
Enter the value of intrest rate
5.245
Enter the no. of period u want put the money away
2.89
Future value is=65255.627743069206
U want to meanu again
Press 0 to show the meanu again
0
Enter your User Name
user
Enter your Password
user
Authentication Successful
press '1' for view Shares
press '2' for advisor
press '3' for Time of value of Money calculator
press '4' to calculate profit and loss
3
Enter 1 to calculate Present Value
Enter 2 to calculate Future Value
2
Enter the Present value value of your Money
8525
Enter the value of intrest rate
1.2564
Enter the no. of period u want put the money away
1.8975
Future value is=8729.383002563267
U want to meanu again
Press 0 to show the meanu again
```

Type here to search

ENG 10:42 PM
14-04-2020

Command Prompt - java CA

```
2.89
Future value is=65255.627743069206
U want to meanu again
Press 0 to show the meanu again
0
Enter your User Name
user
Enter your Password
user
Authentication Successful
press '1' for view Shares
press '2' for advisor
press '3' for Time of value of Money calculator
press '4' to calculate profit and loss
3
Enter 1 to calculate Present Value
Enter 2 to calculate Future Value
2
Enter the Present value value of your Money
8525
Enter the value of intrtest rate
1.2564
Enter the no. of period u want put the money away
1.8975
Future value is=8729.383002563267
U want to meanu again
Press 0 to show the meanu again
0
Enter your User Name
user
Enter your Password
user
Authentication Successful
press '1' for view Shares
press '2' for advisor
press '3' for Time of value of Money calculator
press '4' to calculate profit and loss
4
Enter the loan amount
45554
Enter rate of intrtest
5.1245
Enter time in years
2.548
Compound Intrtest is23.48110513173866
```

Type here to search

10:42 PM
14-04-2020

C:\Users\Vaibhav\Documents\LPU JAVA>java CA

Welcome to Vaibhav's World!

Enter your choice:

Press:

1)For Customer

2)For Administration

2

Enter your User Name

admin

Enter your Password

admin

Authentication Successful

press '1' for Shares

press '2' for Time of value of Money calculator

press '3' for Taxes

1

Enter your choice

Press 1) Adding new products

Press 2) For viewing Products Prices

Press 3) For Deleting the Product detail content

2

JSWSTEEL	JSW Steel Limited	P1	JSW Steel Limited	2.5	2.5	1	23-Mar-05	15-Dec-17	2.5	INE019A04016
JSWSTEEL	JSW Steel Limited	P1	JSW Steel Limited	2.5	2.5	1	23-Mar-05	15-Mar-18	2.5	INE019A04016
JSWSTEEL	JSW Steel Limited	P1	JSW Steel Limited	2.5	2.5	1	23-Mar-05	15-Jun-18	2.5	INE019A04016
JSWSTEEL	JSW Steel Limited	P1	JSW Steel Limited	2.5	2.5	1	23-Mar-05	15-Sep-18	2.5	INE019A04016

U want to meanu again

Press 0 to show the meanu again

0

Enter your choice

Press 1) Adding new products

Press 2) For viewing Products Prices

Press 3) For Deleting the Product detail content

1

Successfully wrote to the file.

U want to meanu again

Press 0 to show the meanu again

0

Enter your choice

Press 1) Adding new products

Press 2) For viewing Products Prices

Press 3) For Deleting the Product detail content

3

Deleted the file: filename.txt

U want to meanu again

Press 0 to show the meanu again

0

1


```
Command Prompt - java CA
Authentication Successful
press '1' for Shares
press '2' for Time of value of Money calculator
press '3' for Taxes
2
Enter 1 to calculate Present Value
Enter 2 to calculate Future Value
1
Enter the Future value value of your Money
95264
Enter the value of intrest rate
7.154
Enter the no. of period u want put the money away
5.1324
Future value is=66821.12208020996
U want to meanu again
Press 0 to show the meanu again
```

```
Command Prompt - java CA
Authentication Successful
press '1' for Shares
press '2' for Time of value of Money calculator
press '3' for Taxes
2
Enter 1 to calculate Present Value
Enter 2 to calculate Future Value
1
Enter the Future value value of your Money
95264
Enter the value of intrest rate
7.154
Enter the no. of period u want put the money away
5.1324
Future value is=66821.12208020996
U want to meanu again
Press 0 to show the meanu again
```

```
0
Enter your User Name
admin
admin
Enter your Password
admin
Authentication Successful
press '1' for Shares
press '2' for Time of value of Money calculator
press '3' for Taxes
2
Enter 1 to calculate Present Value
Enter 2 to calculate Future Value
2
Enter the Present value value of your Money
45256.124
Enter the value of intrest rate
6.666
Enter the no. of period u want put the money away
7.8466
Future value is=75090.71504404735
Total profit is=29834.591044047345
U want to meanu again
Press 0 to show the meanu again
```

Command Prompt - java CA

```
Authentication Successful
press '1' for Shares
press '2' for Time of value of Money calculator
press '3' for Taxes
3
Enter the total profit
45654
Enter rate of intrest
1.18
Enter time in years
5.16645
Tax is:2783.2554779399998
Total Profit is0.0
U want to meanu again
Press 0 to show the meanu again
```

Type here to search

10:46 PM
14-04-2020

Command Prompt - java CA

```
Authentication Successful
press '1' for Shares
press '2' for Time of value of Money calculator
press '3' for Taxes
3
Enter the total profit
4564.64646
Enter rate of intrest
6.6666
Enter time in years
2.356
Tax is:716.9466344459601
U want to meanu again
Press 0 to show the meanu again
```

Type here to search

10:49 PM
14-04-2020

Login

↓
Customer

↓
Administration

1) View share prices

2) Advise to invest
and to take loan

~~3) Loan Interest~~

3) To calculate Time of value
of Money: a) To calc. Present value
b) --- Future value

4) Loan Interest [i.e. Profit or Loss]

1) Shares:

a) To add new shares

b) To view

c) To delete shares

2) Times of value of Money
Calculator

a) Present value calc.

b) To calculate Future Value

3) For Taxes