

```
2) import java.util.Scanner;  
abstract class Account {  
    String cust_name;  
    String acc_no;  
    String acc_type;  
    double balance;  
    double min_bal = 1000.0;  
  
    Account (String cust_name, String acc_no, String acc_type, double  
            balance) {  
        this.cust_name = new cust_name;  
        this.acc_no = acc_no;  
        this.acc_type = acc_type;  
        this.balance = balance;  
    }  
    abstract void deposit (double amount);
```

```
abstract void display();  
abstract void withdraw(double amount);  
}
```

Class Current extends Account {

```
double penalty = 100.0;
```

```
Current(String cust_name, String acc_no, String acc_type, double balance);  
Super(cust_name, acc_no, acc_type, balance);  
System.out.println("Name of the customer : " + cust_name);  
System.out.println("Account Number accno : " + acc_no);  
System.out.println("Account type : " + acc_type);  
System.out.println("Balance : " + balance);  
}
```

void deposit(double amount) {

```
this.balance = this.balance + amount;
```

```
}
```

void withdraw(double amount) {

```
this.balance = this.balance - amount;
```

imposepenalty()

```
System.out.println("The current balance is " + balance);  
}
```

void imposepenalty() {

```
if (this.balance < min_bal) {
```

```
this.balance = this.balance - penalty;
```

```
System.out.println("The balance amount is insufficient, the penalty  
imposed = 100 Rs.");  
}
```

```
}
```

void display() {

```
System.out.println("Balance is : " + this.balance);  
}
```

```
}
```

class ~~Sav~~ Sav_acct extends Account {

```
Sav_acct (String cust_name, String acc_no, String acc_type, double balance) {
    Super (cust_name, acc_no, acc_type, balance);
    System.out.println ("Name of customer : " + cust_name cust_name);
    System.out.println ("Account No Number accno : " + acc_no);
    System.out.println ("Account type : " + acc_type);
    System.out.println ("Balance : " + balance);
}
```

void deposit (double amount) {

this.balance = this.balance + amount;

```
System.out.println ("The balance is " + this.balance);
}
```

void interest () {

int rate = 10, time = 1;

```
float ci = (float)(this.balance * Math.pow(1 + rate / 100.0, time) -
    this.balance);
```

this.balance = this.balance + ci;

```
System.out.println ("The balance is " + this.balance);
}
```

```
System.out.println ("The interest amount added to balance is ?ci);
}
```

void withdrawal (double amount) {

this.balance = this.balance - amount;

```
System.out.println ("The current balance is " + balance);
}
```

void display () {

```
System.out.println ("Balance is : " + this.balance);
}
```

}

Class Wk8prog2 {

```
public static void main (String [ ] args) {
    Scanner sc = new Scanner (System.in);
}
```

double amount ;

int flag = 0 ;

while (flag == 0) {

System.out.println ("Enter the type of Account : In 1: Current account

In 2 : Savings account In 3 : Exit ");

int choice = xx.nextInt();

switch (choice) {

Case 1 :

System.out.println ("In Current account In ");

System.out.println ("Enter the name of account holder ");

String f = xx.next();

System.out.println ("Enter the account Number ");

String g = xx.next();

System.out.println ("Enter the balance amount ");

double h = xx.nextDouble();

CurrAcct c = new CurrAcct (f, g, "current ", h);

int flag1 = 0;

while (flag1 == 0) {

System.out.println ("Enter your choice In 1 : Deposit amount In 2 : Display Balance In 3 : Withdraw In 4 : Exit ");

int choice1 = xx.nextInt();

switch (choice1) {

Case 1 :

System.out.println ("Enter amount to be deposited : ");

amount = xx.nextDouble();

c.withdraw (amount);

break;

Case 2 :

c.display();

break;

Case 3 :

```
System.out.println ("Enter amount you want to withdraw : ");  
amount = x2.nextInt();  
if (amount >= 1000) {  
    System.out.println ("nettAble");  
    withdrawal (amount);  
    break;  
}  
default :  
    flag = 1;  
}  
}  
  
break;
```

Case 2:

```

System.out.println ("Enter Savings account : In");
System.out.println ("Enter the name of account holder");
String p = xrc.next();
System.out.println ("Enter the account number");
String q = xrc.next();
System.out.println ("Enter the balance amount");
double r = xrc.nextDouble();
Savacct s = new Savacct (p, q, "Savings", r);
int flag2 = 0;
while (flag2 == 0) {
    System.out.println ("Enter your choice \n 1 : Deposit Amount \n 2 : Display Balance and Interest \n 3 : Withdraw \n 4 : Exit");
    int choice2 = xrc.nextInt();
    switch (choice2) {
        Case 1 : System.out.println ("Enter the amount to be deposited : ");
        amount = xrc.nextDouble();
        s.deposit (amount);
        break;
        Case 2 : s.display ();
        s.interest ();
        break;
    }
}

```

Case 3 :

System.out.println("Enter the amount you want to withdraw?");

amount = xx.nextDouble();

s.withdraw(amount);

break;

default : flag2 = 1;

}

}

break;

default : flag = 1;

}

}

}