LAB PROGRAM - 5

```
import java.util.Scanner;
import java.lang.Math;
class Account
{
 String name, acc_type;
 int acc_no;
 double bal, deb;
 Scanner ss = new Scanner (System.in);
 void setd()
 {
 System.out.println ("Enter your name:");
 name = ss.next();
 System.out.println ("Enter your account number:");
 acc_no= ss.nextInt();
 System.out.println ("Enter your account type
   (Savings |current)");
 ~~Account_ty~~ acc_type = ss.next ();
 System.out.println ("Enter the Bank
   Balance"); ~~bal = ss. next~~
 bal = ss.nextDouble();
 }
```

```
void disp() {
System.out.println("Name:"+name);
  System.out.println("Account Number:"+acc_no);
System.out.println("Account type:"+acc_type);
System.out.println("Current Balance is:"+bal);
}
 void deposit() {
System.out.println("Enter the amount to be
                    deposited:");
   dep = ss.nextDouble();
    bal+ = dep;
System.out.println("Balance amount:"+bal)
 }

  boolean acc(String acc_type)
{ if (acc_type == "Savings")
      return true;
  else if (acc_type == "Current")
      return false;
   else
      return true;
   }
}
```

```
class cur_act extends Account
{
  int penal()
  { double min, pen;
    System.out.println("In Enter minimum bal
    & penalty amount if not followed:");
min = ss.nextDouble(); ~~pen =~~
 pen = ss.nextDouble();
 if (bal < min)
 {
   bal -= pen;
System.out.println(" penalty imposed
for having insufficient balance"); }
 else
   return 1;
}
void withdrawal()
{
  double amt;
System.out.println("Enter amount to be
 withdrawn : ");
~~double~~ amt = ss.nextDouble();
          int a = penal();
           if (a == 1)
          {
            if (bal >= amt)
```

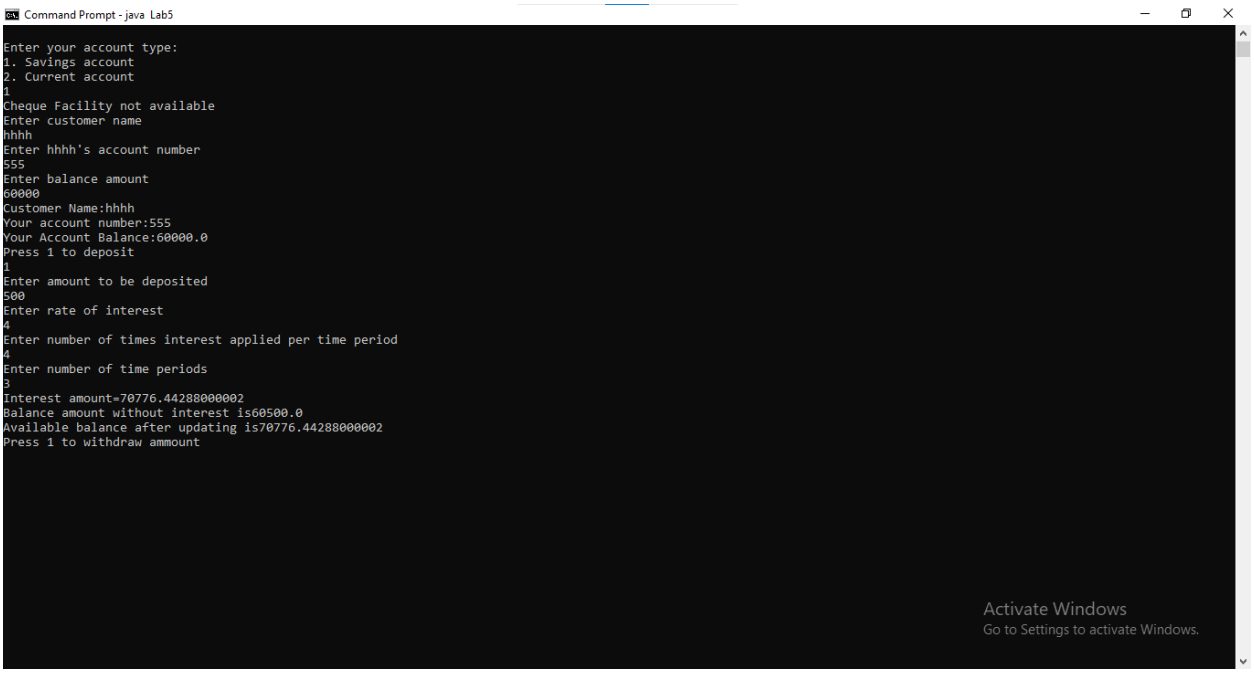
```
    {
        bal -= amt;
System.out.println("Account balance after
    withdrawal is:" + bal); }
    }
    else
System.out.println("\n The amount can't
    be withdrawn");

    }
}
class Sav_act extends Account
{
void calc_interest()
{
System.out.println("Enter time and
    rate of interest");
    double t = ss.nextDouble();
    double r = ss.nextDouble();
double CI = ~~balance~~ ~~bal * Math~~
    bala * Math.pow((1+r)/100), t);
System.out.println("\n Compont interest
                    is" + CI);
    bal += CI;
System.out.println("Balance amount:"+ba
}
```

```
void withdrawal ()
{ double amt;
System.out.println("Enter amount to be
                    withdrawn:");
  amt = ss.nextDouble();
    if (bal >= amt)
    { bal -= amt;
System.out.println("Account Balance after
   withdrawal is:" + bal);}
}
else
 System.out.println("\n The amount
 can be withdrawn");
}
}
 class Bank
{
 public static void main(String args[])
 {
Scanner ss = new Scanner(System.in);
Account a1 = new Account();
  a1.setd();
if (a1.acc(a1.acc_type) == true)
```

```
{
  sav_act s1 = new sav_act();
   s1.name = a1.name;
  s1.acc_no = a1.acc_no;
   s1.acc_type = a1.acc_type;
   s1.bal = a1.bal;
System.out.println("enter your choice.\n
   1.Deposit \n 2.calculate interest \n
   3.withdraw \n 4.Display \n 5.Exit");
     int ch = ss.nextInt();
     switch(ch)
     {
      case 1: s1.deposit1();break;
      case 2: s1.calc_interest();break;
      case 3: s1.withdrawal();break;
      case 4: s1.disp();break;
      case 5: exit(0);break;
default System.out.println("Invalid input");
     }
}
 else
{
  cus_acc c1 = new cus_acct();
  c1.name = a1.name;
  c1.acc_no= a1.acc_no;
```

```
c1.acc_type = a1.acc_type;
c1.bal = a1.bal;
System.out.println("\n Enter your
choice: /n1. Deposit /n2. Penalty check /n
3. Withdraw /n4. Display /n5. Exit");
int ch = ss.nextInt();
switch(ch)
{
case 1: c1.deposit(); break;
case 2: c1.penal(); break;
case 3: c1.withdrawal(); break;
case 4: c1.disp(); break;
case 5: exit(0); break;
default: System.out.println("Invalid input
}
}
}
```

Output.


Command Prompt - java Lab5
Enter your account type:
1. Savings account
2. Current account
1
Cheque Facility not available
Enter customer name
hhhh
Enter hhhh's account number
555
Enter balance amount
60000
Customer Name:hhhh
Your account number:555
Your Account Balance:60000.0
Press 1 to deposit
1
Enter amount to be deposited
500
Enter rate of interest
4
Enter number of times interest applied per time period
4
Enter number of time periods
3
Interest amount=70776.44288000002
Balance amount without interest is60500.0
Available balance after updating is70776.44288000002
Press 1 to withdraw ammount
Activate Windows
Go to Settings to activate Windows.