Program 5

```
import java.util.Scanner;
import java.lang.Math;

class Account
{
    String cus_name;
    String acc_no;
    String acc_type;
    double balance;
}
class curr_acc extends Account
{
    System.out.println("Enter the customer name");
    cus_name = in.nextLine();
    System.out.println("Enter the account number");
    acc_no = in.nextline();
    System.out.println("Enter the balance");
    balance = in.nextDouble();
}
void min()
{
    System.out.println("Enter the customer name:");
    cus_name = in.nextLine();
    System.out.println("Enter the account number:");
    acc_no = in.nextLine();
    System.out.println("Enter the balance:");
    balance = in.nextDouble();
}
    void main()
{
    System.out.println("Enter the minimum balance to be
                        maintained:");
    min_bal = in.nextDouble();
```

```
System.out.println("Enter the service charge to be imposed
    (in %) if minimum balance is not present : ");
ser_charge = in.nextDouble();

if(balance<min_bal)
  {
    System.out.println("Balance less than min_bal and service
          charge imposed : ");
    balance = balance - (ser_charge*0.01*balance);
    System.out.println("Balance after service charge is
          imposed :"+balance);
  }
}
void deposit()
{
  double amt;
  System.out.println("Enter the amount to be deposited : ");
   amt = in.nextDouble();
   balance = balance+amt;
}
void withdraw()
{
double amt;
System.out.println("Enter the amount to be withdrawn : ");
amt = in.nextDouble();
  if(balance>=amt)
    {
      balance = balance-amt;
      System.out.println("Balance after withdrawl : "+balance);
    }
```

```
else
{
  System.out.println("Amount cannot be withdrawn");
}
}
void dis()
{System.out.println("Balance : "+balance);
}
}
class sav_acc extends Account
{
  Scanner in = new Scanner(System.in);
 sav_acc()
{
  System.out.println("Enter the customer name:");
   cus_name = in.nextLine();
   System.out.println("Enter the account number :");
    acc_no = in.nextLine();
   System.out.println("Enter the balance :");
    balance = in.nextDouble();
}
void cmpInt()
{ double cpint;
   System.out.println("Enter the rate(%) of compound interest:");
   int r=in.nextInt();
   System.out.println("Enter n=12 if compounded monthly n=1 if
                       compounded yearly :");
    int n = in.nextInt();
```

```
System.out.println("Enter the time elapsed in year :");
int t = in.nextInt()
cpint = Math.pow(C1 + ((r+0.01/m)),t);
balance = balance*cpint ;
System.out.println("Compound intrest :"+cpint);
System.out.println(" Balance after computing compand intrest:
                    +balance);
}
void deposit ()
{ double amt;
  System.out.println("Enter the amount to be deposited :");
  amt = in.nextDouble();
  balance = balance + amt;
}
  void withdraw ()
{
  double amt;
  System.out.println("Enter the amount to be withdrawn :");
  amt = in.nextDouble();
  if (balance>=amt)
  {
    balance = balance - amt;
    System.out.println("Balance after withdrawl :"+balance);
  }
  else
  {
   System.out.println("Amount cannot be withdsawn");
  }
}
```

```
void dis()
{
System.out.println("Balance :"+balance);
}}

class Bank
{
public static void main(String args[])
{
Scanner in = new Scanner(System.in);
System.out.println("Enter the type of account you want
    to opt 1:CURRENT AMOUNT  2:SAVINGS ACCOUNT :");
int type=in.nextInt();
if(type==1)
{
curr_acc a1 = new curr_acc();
while(true)
{
System.out.println("Enter any option \n"+"1:DEPOSIT\n"
      +"2 : DISPLAY\n"+" 3 : WITHDRAW\n"+"4 :
      SERVICE CHARGE\n");
int ch = in.nextInt();
switch(ch)
{
case 1 : a1.deposit();
         break;
case 2 : a1.dis();
         break;
case 3 : a1.withdraw();
         break;
case 4 : a1.min();
         break;
default : System.out.println("Enter valid option");
          System.exit(0);
```

```
        }
    }
}
else
{
    Sav_acc a2 = new Sav_acc();
    while (true)
{
    System.out.println("Enter any option \n" + "1 : DEPOSIT " +
                       2: DISPLAY\n" + " 3 : WITHDRAW\n" +
                       4: COMPOUND INTREST\n");
    int ch = in.nextInt();
    Switch(ch)
    {
        case 1 : a2.deposit();
                 break;
        case 2 : a2.dis();
                 break;
        case 3 : a2.withdraw();
                 break;
        case 4 : a2.cmpInt();
                 break;
        default : System.out.println("Enter valid option");
                  System.exit(0);
    }
}
}
}
```