```
import java.util.Scanner;
class account
{
    string name, accnum, acctype;
    double balance;
    account() { }
    /* {
        if (a==1)
            acctype="savings";
        else if (a==2)
            acctype="current";
    } */
    void input()
    {
        Scanner sc= new Scanner(System.in);
        System.out.println("enter name, acc number");
        name=sc.next();
        accnum=sc.next();
        System.out.println("enter balance");
        balance=sc.nextInt();
    }
    void displaydetails()
    {
        System.out.println("\nname="+name+"\naccnumber
            ="+accnum+"\nbalance="+balance+
            "\naccount type="+acctype);
    }
void display()
{
System.out.println("balance="+balance);
```

```
    }
}
class currAcct extends Account
{
  currAcct()
    { acctype = "current";
    }
    double minbal= 5000;
    void check()
    {
      double penalty =100;
      if(balance<minbal)
       { balance= balance - penalty;
         System.out.println("penalty is imposed");
      System.out.println("balance =" +balance);
    }
    else
    {
      System.out.println("penalty not imposed");
    }
  }
void deposit()
{
  Scanner sc= new Scanner(System.in);
   System.out.println("enter amt to deposit");
   double amt = sc.nextDouble();
   balance= balance+amt;
  }
}
class savAcc extends Account
{
```

```
savAcc()
{
  acctype="s
}
double ci;
void calcam
{
  ci=bal
  balan
  Syste
  System
}
void w
{ dou
  if(b
  syst
  el
}
void
{
  System
  Scan
  dou
  dep
  bala
```

```
savacc()
{
  acctype1="savings";
}
double ci;
void calcompound(int n, int t)
{
    ci=balance*(Math.pow((1+(0.2/n)),(n*t)));
    balance=balance+ci;
    System.out.printf("compound interest:%.2f",ci);
  System.out.printf("\n balance:%.2f", balance);
}
void withdrawal(double amt)
{
   double minbal=5000;
   if(balance<5000)
   system.out.println("amount can't be withdrawn
      as min balance(5000)constraint will be
       violated");
   else
      balance=balance-amt;
}
void deposit()
{
System.out.println("enter amount to deposit");
Scanner sc=new Scanner(System.in);
double depamt;
depamt = sc.nextDouble();
balance= balance+depamt;
```

```
System.out.println("balance="+balance);
}
}
class AccountMain
{
public static void main(String[] args)
{
Scanner sc=new Scanner(System.in);
//Account A=new Account();
System.out.println("enter 1 for savings
account, 2 for current account");
int acctype=sc.nextInt();
savacc s=new savacc();
currAct c=new currAct();
if(acctype==1)
{
System.out.print("enter your details:");
s.input();
s.displaydetail();
System.out.println("number of times
interest to be compounded per unit
t(u), time in years");
int n=sc.nextInt();
int t=sc.nextInt();
sc.calcompound(n,t);
int n1=1;
while(n1==1)
{
System.out.println("enter 1.
deposit 2.withdrawal 3.exit");
```

```
int w = sc.nextInt();
if(w==1)
{
 s.deposit();
}
else if(w==2)
{
 System.out.println("enter the amount :");
 double amt= sc.nextDouble();
 s.withdrawal(amt);
 s.display();
}
else
{
 System.exit(0);
}
}
}
else if(acctype==2)
{
 System.out.println("enter your details:");
 c.input();
 c.displaydetails();
 c.check();
 c.deposit();
 c.display();
}
}
}
```