1BM19CS216

6/11/2020

Lab 5:

```
import java.util.*;
import java.lang.math;
class Account
{
    String name;
    int acctno;
    char type;
    double balance ;
    double dep;
    boolean cheq;

  void get (char c)
  {
     type = c;
    if (c=='s' || c=='S')
    cheq = ~~true~~false;
    else cheq = true;
  Scanner sc = new Scanner (System.in);
  System.out.println ("Enter your name");
  name = sc.nextLine();
  System.out.println("Enter your account no.");
  acctno = sc.nextInt();
  System.out.println("Enter the current balance
        in your account");
     balance = sc.nextDouble();
}
void putd()
{
   System.out.println("Account details");
```

```
        System.out.println("Name : "+name);
System.out.println("Account number :"+accno);
System.out.println("Account type :"+type);
System.out.println("balance :"+balance);
}

void dep()
{
  Scanner ss = new Scanner(System.in);
  System.out.println("Enter the amount to
      be deposited");
  dep = ss.nextDouble();
balance = balance + dep;
System.out.println("Amount has been deposited
      and balance has been updated");
}
void display()
{
    System.out.println("Balance amount is"+
      balance);
}
}
class Saving extends Account.
{
    double rate;
    double s_with;
    int n;
```

```
    int ch;
    double amt;
    double term;
    double pr;

void ci()
{
  Scanner ss = new Scanner(System.in);
System.out.println("Enter principal deposit
    amount");
  pr = ss.nextDouble();
System.out.println("Enter the rate of
      interest");
  rate = ss.nextDouble();
System.out.println("Enter the terms (years)");
  term = ss.nextDouble();
System.out.println("Enter the number of time
  interest in compounded annually");
    n = ss.nextInt()
  amt = pr * Math.pow((1 + (rate/100)),
                      (n*term));
    balance = amt;
System.out.println("Interest is compounded
    and deposited");
}
void with_s()
{
  Scanner ss = new Scanner(System.in);
System.out.println("Enter the amount to
      be withdrawn");
```

```
    s_with = ss.nextDouble();
  if (s_with > balance)
System.out.println("Insufficient balance");
else.
{
 balance = balance - s_with;
System.out.println("Money has been withdrawn
   and balance is updated");
}
}
class Current extend Accoont
{
      double c_with;
      double pen;
      double min;
     Current()
  {
   pen = 100;
   min = 500;
  }
void with_c()
{
 Scanner xx = new Scanner(System.in);
System.out.println("Enter the amoont to be
          withdrawn");
  c_with = xx.nextDouble()
   if (c_with > balance)
{
  System.out.println("Insufficient funds!");
```

```
return;
}
else
{
   balance = balance_with;
System.out.println("Amount has been withdrawn
   and balanced has been updated"); }
if (balance<min)
{
System.out.println("Balance is below the
   minimum threshold. Service penalty
   charge = 100 /-");
if (balance < pen)
System.out.println("Due to insufficient
funds penalty charg will be debited
from account after replenishing. Current
balance is" + balance);
}
   balance = balance - pen;
System.out.println("Penalty charge has
been deducted from acc. balance.
Curr+ balance is" + balance);
}
}
class Bank {
   public static void (String sss[])
{
```

```
int cch, chh
Scanner sx = new Scanner (System.in);
System.out.println (" welcone ");
System.out.println (" 1. Saving ; 2:Corre
int ch = sx.next()
if (ch==1)
{
    Saving s = new Saing()
    s.get('s')
do {
System.out.println (" 1. Deposit \n2. Calcul
interest \n3. Withdraw \n4. Display
\n 5. Exit ");
System.out.println ("Enter your choice");
    chh = sx.nextInt();
    switch(chh)
{
case 1:
    s.dep()
    break;

case 2:
    s.with_s();
    break;

case 4:
    s.display()
break;
```

```
case 5:
  break;

default:
 System.out.println("wrong opt.");
 break;
}
while (chh! =5);
}
else if (ch==2)
{
  Current cr = new Current()
      cr.get('C')
   do{
System.out.println(" 1. Deposit \n2 withdraw
      3. In Display \n4. Exit);
   ch = s.nextInt()
    Switch (ch)
{
   case 1:
    cr.dep()
     break;

  case 2:
   cr.with_c()
    break;

  case 3:
    cr.display()
    break;
```

```
        case 4:
            break;

        default:
        System.out.println ("wrong option.");
        break;
    }
    }
    while (ch!=5);
}
else
    System.out.println ("wrong!");
}
}
```