AVIRATH HEGDE - 1BM19CS195

LAB-5

```
import java.util.*;
import java.lang.math
class Account
{
    String name;
    int acct-no;
    char type;
    double balance;
    double dep;
    boolean cheq;

    void get(char c)
    {
      type = c;
      if (c== 's' || c== 'S')
      cheq = false
else cheq = true
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter your name");
    name = sc.nextLine();
    System.out.println("Enter the account number");
    acct-no = sc.nextInt();
    System.out.println("Enter the current available balance in your
       account");
    balance = sc.next Double();
    }

    void put()
    {
```

```
System.out.println("Account details");
System.out.println("Name:"+name);
System.out.println("Account number:"+acctno);
System.out.println("Account type:"+type);
System.out.println("balance:"+balance);
}
Void dep()
{
Scanner ss = new Scanner(System.in);
System.out.println("Enter the amt 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);
}

Void check()
{
if(cheq==false)
System.out.println("Cheque book facility is not available");
else
System.out.println("Cheque book facility is available");
}
}
class Saving extends Account.
{
```

```
class Saving extends Account
{
    double rate;
    double S_with
    int n;
    int ch;
    double amt;
    double term;
    double pr;
  void cl()
  {
    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 term(years)");
    term = ss.nextDouble();
  System.out.println("Enter the number of times in compound annually");
    n = ss.nextInt();
    amt = pr * Math.pow((1+(rate/100)), (n*term));
    balance += amt;
  System.out.println("Interest is compounded & deposited & balance as
        updated");
    }
  void with_s()
  {
      Scanner ss = new Scanner(System.in);
      System.out.println("Enter the amt of money 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        withdrawn");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System.out.println("Money has been withdrawn and balance has
been updated");
}
}
}

class Current extends Account
{
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 amount to be withdrawn");
c_with = xx.nextDouble();
if(c_with > balance)
{
System.out.println("Insufficient funds!");
return;
}
```

```
else
    {
        balance -= with;
System.out.println(" Amount has been withdrawn and balance 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 charge
 will be deducted from account after replenishing. Current balance
 is" + balance);
 else
  {
      balance = balance - pen;
System.out.println(" Penalty charge has been deducted from
 account balance. Current balance :" + balance );
                    }
                }
            }
        }
class lab5
  {
   Public static void maind (String args[])
    {
      int cch, chh;
     Scanner sc = new Scanner (System.in);
      System.out.println(" -- welcome --");
     System.out.println(" Savings acc / current acc? 1- savings, 2- current),
```

```
int ch= Sx.nextInt();
if (ch==1)
{
  Saving s= new Saving();
  s.get('s');
do{
  System.out.println("1. Deposit money \n 2. calculate
    CI \n 3. Withdraw money \n 4. Display balance \n 5.
    Cheque book facility \n 6. Exit");
    System.out.println("Enter your choice");
   chh= Sx.nextInt();
    Switch(chh)
{
        case 1:
        s.dep();
       break;

        case 2:
        s.ci();
        break

        case 3:
        s.with_c();
        break;

       case 4:
       S.display();
       break;

       case 5:
       s.check();
       break;
```

```
case 6:
 break;

default:
   System.out.println("Wrong option");
    break;
   }
} while(ch!=6);
}
else if(ch==2)
{
   Current cu= new Current();
   cu.get('c');
   do{
System.out.println("1.Deposit money\n 2. cheque book facilities\n
 3. withdraw ~~no~~ money\n 4. Display balance\n 5. Exit");
     ch = sx.nextInt();
    Switch(ch)
    {
      case 1:
      cu.dep();
      break;

      case 2:
      cu. chek()
      break;

       case 3:
      cu. with_c();
      break;
```

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

  case 5:
  break;

  default:
    System.out.println("Lựa chọn không hợp lệ.");
    break;
  }
} while(ch!=5);
  }
else System.out.println("Không!");
    }
}
```