

Lab Program 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 = 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");  
        acctno = sc.nextInt();  
        System.out.println ("Enter the current available  
                             balance in your account");  
        balance = sc.nextDouble();
```

```
}
```

```
void put d ()
```

```
{
```

```
    System.out.println ("Account details");
```

```
    System.out.println ("Name : "+name);
```

```
    System.out.println ("Account number: "+autno);
```

```
    System.out.println ("Account type : "+type);
```

```
    System.out.println ("balance : "+balance);
```

```
}
```

```
void dep ()
```

```
{
```

```
    Scanner ss 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);
```

```
}
```

```
void check ()
```

```
{
```

```
    if (cheq == false)
```

```
        System.out.println ("Cheque book facility is  
                            not available");
```



```
else  
System.out.println("cheque book facility is  
available");
```

```
3  
}  
class Savings extends Account  
{
```

```
double rate;  
double rate;  
double s_with;  
int n;  
int ch;  
double amt;  
double term;  
double pr;  
void ci()  
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 term (years)");  
term = ss.nextDouble();  
System.out.println("Enter the number of times  
interest is compound annually");
```

```
n = ss.nextDouble();
```

```
System.out.println("Enter the number of times  
interest is compounded  
annually");
```

```
n = ss.nextInt();
```

```
amt = pr * Math.pow((1 + (rate/100)), (n * terms));  
balance += amt;
```

```
System.out.println("Interest is compounded  
and deposited is updated");
```

```
}
```

```
void withdraw()
```

```
{
```

```
Scanner ss = new Scanner(System.in);
```

```
System.out.println("Enter the amount 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
```

```
    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 is  
" + balance);
```

```
}
```

```
}
```

```
}
```

```
}
```

```
public class Lab6
```

```
{
```

```
    public static void main (String sss[])
```

```
    {  
        int cch, chh;
```

```
        Scanner sx = new Scanner (System.in);
```

```
        System.out.println ("-----WELCOME-----");
```

```
        System.out.println ("Savings account or current  
account : 2 - Current");
```

```
        int ch = sx.nextInt();
```

```
        if (ch == 1)
```

```
{
```

```
            Saving s = new Saving ();
```

```
            s.get ('s');
```

```
            do {
```

```
                System.out.println ("1. Deposit money\n2. Calculate  
compound interest\n3. Withdraw  
money\n4. Display balance\n5. Cheque book facility\n6. Exit");
```



```
System.out.println("Enter your choice");  
ch = sx.nextInt();  
switch (ch)  
{
```

```
    case 1:  
        s.dep();  
        break;
```

```
    case 2:  
        s.ci();  
        break;
```

```
    case 3:  
        s.with_s();  
        break;
```

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

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

```
    case 6:  
        break;
```

```
    default:  
        System.out.println("Wrong option.");
```

```

        break;
    }
}
while (ch != 6);
}
if else if (ch == 2)
{
    Current cr = new Current();
    cr.get('c');
    do {
        System.out.println("1. Deposit money\n2. Cheque  
book facility\n3. Withdraw  
money\n4. Display balance  
5. Exit");
        cch = sx.nextInt();
        switch (cch)
        {
            case 1:
                cr.dep();
                break;

            case 2:
                cr.check();
                break;

            case 3:
                cr.with_c();
                break;
        }
    } while (cch != 5);
}

```


case 4:

or. display 1);

break;

Case 5:

break;

default:

System.out.println("Wrong option.");

break;

}

} while (cch != 5);

}

else system.out.println("Wrong!");

}

}