

lab 5

```
Import java.util.Scanner;
```

```
Import java.lang.Math;
```

```
class Account
```

```
{
```

```
String Name;
```

```
int accNo;
```

```
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 ac number");
```

```
accNo = sc.nextInt();
```

```
System.out.println ("Enter the current  
available balance in your  
account");
```

```
Balance = sc.nextDouble();
```

```
}
```

```
void putd()
```

```
{  
    System.out.println("Account details");  
    System.out.println("Name: " + name);  
    System.out.println("Account Number: " + acno);  
    System.out.println("Account type: " + type);  
    System.out.println("Balance: " + balance);  
}
```

```
void dep()
```

```
{  
    Scanner ss = new Scanner(System.in);  
    System.out.println("Enter amount to be deposited");  
    dep = ss.nextDouble();  
    Balance = balance + dep;  
    System.out.println("Amount is deposited and  
    balance is updated");  
}
```

```
void display()
```

```
{
```

```
    System.out.println("Balance amount is: " + balance);  
}
```

```
void check()
```

```
{
```

```
    if (check == false)
```

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

```
    else
```

```
        System.out.println("Cheque Book facility is  
        available");
```

```
    }
```

```
}
```

class Saving extends Account

{

double rate;

double s-with;

int n;

int chi;

double amt;

double term;

double pr;

void circ()

{

Scanner ss = new Scanner (System.in);

System.out.println ("Enter the principal deposit amount");

pr = ss.nextDouble();

System.out.println ("Enter 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 compounded annually");

n = ss.nextInt();

amt = pr \* Math.pow ((1 + rate / 100), (n \* term));

Balance + = amt;

System.out.println ("Interest is compounded  
+ deposited; balance is  
updated");

```
void withdraw()
```

{

```
Scanner ss = new Scanner(System.in);  
System.out.println("Enter the money to be  
withdrawn");
```

```
s-with = ss.nextDouble();
```

```
If (s-with > Double.Balance)
```

```
System.out.println("Insufficient Balance");
```

```
else
```

```
Balance = Balance - s-with;
```

```
System.out.println("Money is withdrawn &  
balance is updated");
```

```
}
```

```
}
```

```
class current extends Account
```

{

```
double c-with;
```

```
double per;
```

```
double min;
```

```
current()
```

{

```
per = 100;
```

```
min = 500;
```

```
}
```

```
void withdraw()
```

{

```
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 = Balance - c-with;  
System.out.println("Amount is withdrawn from  
balance is updated");  
}

}

if(Balance < min)

{

System.out.println("Balance is Below the  
minimum threshold. Service  
penalty = 100 (- . . .);

if(Balance < pen)

System.out.println("Due to insufficient funds,  
penalty charge will be  
deducted");

else

{ balance = balance - pen;

System.out.println("Penalty - charge has  
been deducted from  
Account Balance.

The balance is "+ balance);

}

}

}

class lab5

{

public static void main (String ss[])

{

int ch1, ch2;

Scanner scx = new Scanner (System.in);

System.out.println ("Welcome");

System.out.println ("Savings account or current  
account? 1 - Savings; 2 - Current");

int ch = sc.nextInt();

if (ch == 1)

{

Saving s = new Saving();

s.get ('S');

do

{

System.out.println ("1. Deposit money |n");

2. Calculate compound interest |n

3. withdraw money |n

4. Display Balance |n

5. Change Password

6. Exit");

System.out.println ("Enter your choice");

ch = sc.nextInt();

switch (ch)

{

case 1: s.depl();

    break;

case 2: s.dci();

    break;

case 3: s.with - sc();

    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 = new Current();
    cr.get('C');
    do
    {
        System.out.println("1. Deposit money\n"
                           "2. Cheque Book\n"
                           "3. Withdraw money\n"
                           "4. Display Balance\n"
                           "5. Display Exit");
        chh = sc.nextInt();
        switch(chh)
        {
            case 1: cr.dep();
            break;
            case 2: cr.check();
            break;
            case 3: cr.withdraw();
            break;
            case 4: cr.display();
            break;
            case 5: break;
            default:
                System.out.println("Wrong option");
                break;
        }
    } while (chh != 5);
    else System.out.println("Wrong!");
}
```