

lab program 5

```

import java.util.Scanner;
import java.lang.Math;
class Account
{
    Scanner ss = new Scanner (System.in);
    String acc_name;
    String acc_no;
    int acc_type;
    double balance;
    void Create Account ()
    {
        System.out.println ("Enter the Details of the new
        account :");
        System.out.println ("Name :");
        acc_name = ss.next();
        System.out.println ("Ideal Account number:");
        acc_no = ss.next();
        if (acc_type == 1)
        {
            System.out.println ("Enter the first Deposit
            balance = ss.next Double Value");
            System.out.println ("thank you for creating
            an Account");
        }
        else
        {
            System.out.println ("Enter the Deposit Value
            (above 5000):");
            balance = ss.next Double();
            System.out.println ("thank you for creating
            In You will shortly receive your cheque
            Book.");
        }
    }
}

```

```

    {
        return acc-no;
    }
    void Display()
    {
        System.out.println("The Account Details are  

        given as follows:");
        System.out.println("Name: " + acc-name);
        System.out.println("Account Number: " + acc-no);
        if (acc-type == 1)
            System.out.println("Account type: Current  

            Saving Account");
        else
            System.out.println("Account type: Current  

            Account");
    }
}

```

class Sav_Acct extends Account.

```

{
    void withdraw()
    {
        double amount;
        System.out.println("Enter the Amount to be  

        written:");
        amount = sc.nextDouble();
        balance -= amount;
    }
    void deposit()
    {
        double amount;

```

```

    }
    void compoundInterest()
    {
        byte years-of-dep;
        double interest;
        System.out.println("Enter the number of
        years for compound interest:");
        years-of-dep = ss.nextByte();
        interest = (balance * Math.pow(1 + (4.5/100),
        years-of-dep)) - balance;
        System.out.println("the compound interest
        is: " + interest);
    }
}

```

```

class Curr.Acct extends Account
{
    void withdraw()
    {
        double amount;
        System.out.println("Warning: A minimum of
        5000 balance must be maintained. If
        failed, a Penalty of Rs 100 will be imposed
        ");
        System.out.println("Enter the Amount to be
        withdrawn:");
        amount = ss.nextDouble();
        balance -= amount;
        penaltyCheck();
    }
    void deposit()
    {
        double amount;
    }
}

```


amount = ss.next Double ();
balance + = amount;
}

void penalty check ()
{

if (balance < 5000)
{

int pen = 100;

System.out.println ("the balance is less
than 5000 a penalty of Rs 100 rs imposed");

balance - = pen;

}

}

}

class Bank

{

public static void main (String args [])
{

Sav_Acct s_acct [] = new Sav_Acct [10];

Cur_Acct c_acct [] = new Cur_Acct [10];

Scanner ss = new Scanner (System.in);

String acctno;

int ch, i = 0, j = 0;

while (true)

{

System.out.println ("Welcome to the Bank In");

System.out.println ("Enter the action to be
performed:");

System.out.println ("1: Create a Savings
Account in 2: Create a Current Account");

System.out.println ("3: Deposit in 4: Withdraw
5: Display Balance in 6: Check

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

```
{  
    case 1: S.acct[i] = new Sav.Acct();  
            S.acct[i].acc-type = 1;  
            S.acct[i].CreateAccount();  
            i++;  
            break;
```

```
    case 2: C.acct[j] = new Cur.Acct();  
            C.acct[j].acc-type = 2;  
            C.acct[j].CreateAccount();  
            j++;  
            break;
```

```
    case 3: System.out.println("Enter the  
            account number:");  
            acctno = ss.nextInt();  
            for(int k=0; k<y; k++)
```

```
{  
            if (acctno.equals(C.acct[k].getAccountNo()  
                                ()))
```

```
                System.out.println("This Account is a Saving  
                Account");
```

```
                S.acct[k].deposit();  
            }
```

```
        }
```

```
        break;
```

```
    case 4: System.out.println("Enter the account  
            number:");
```

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

```
            for(int k=0; k<y; k++)
```

```
{
```

Write

```
System.out.println("This Account is a Current Account  
:");
```

```
C- acct[k].withdraw();
```

```
}
```

```
for (int k=0; k<i; k++)
```

```
{
```

```
if (acctno.equals(C-acct[k].getAccounts No()))
```

```
{
```

```
System.out.println("This Account is a Saving Account  
:");
```

```
S-acct[k].withdraw();
```

```
}
```

```
}
```

```
break;
```

```
Case 5: System.out.println("Enter the account  
number ");
```

```
acctno=ss.next();
```

```
for (int k=0; k<j; k++)
```

```
{
```

```
if (acctno.equals(C-acct[k].getAccounts No()))
```

```
C-acct[k].Display();
```

```
}
```

```
for (int k=0; k<i; k++)
```

```
{
```

```
if (acctno.equals(S-acct[k].getAccounts No()))
```

```
S-acct[k].Display();
```

```
}
```

```
break;
```

```
Case 6: System.out.println("Enter the account  
number ");
```

if (actno.equals(c acct[k].getAccountNo()))
System.out.println("this is a current account.
In the account does not provide interest.");
}

for (int k=0; k<i; k++)
{
}

if (actno.equals(s acct[k].getAccountNo()))
s acct[k].compound-interest();
}

break;
}

}

}

}

}