

Lab-5.

Bank program.

```
import java.io.*;  
import java.lang.*;  
import java.util.*;  
abstract class account.  
{
```

```
    String name;
```

```
    String acc-no;
```

```
    String type;
```

```
    double balance;
```

```
    account (String n, String a, String t, double b)  
    {
```

```
        name = n;
```

```
        acc-no = a;
```

```
        type = t;
```

```
        balance = b;
```

```
    }
```

```
    abstract void deposit();
```

```
    abstract void display();
```

```
    abstract void withdraw();
```

```
    abstract void find();
```

```
    abstract void inter();
```

```
}
```

```
class curr-acc extends account  
{
```

```
    curr-acc (String n, String a, String t, double b)
```

```
    {
```

```
        deposit (n, a, t, b);
```

```
    }
```



```

void fine()
{
    if (balance < 1000)
    {
        system.out.println("You'll be Fined 500Rs  

        Because Minimum balance in your account must be 1000");
        balance = balance - 500;
        display();
    }
    else
    {
        system.out.println("You will not be charged  

        any fine Thank you");
        display();
    }
}

```

```

void display()
{
    system.out.println("Name of the Account Holder  

    is " + name);
    system.out.println("Account number of the  

    Account Holder is " + acc_no);
    system.out.println("Type of the account of  

    the Account Holder is " + type);
    system.out.println("Balance in your account  

    is " + balance);
}

void deposit()
{

```



```

double sum;
Scanner sc = new Scanner(System.in);
System.out.println("Enter the amount you want
To Deposit");
sum = sc.nextDouble();
balance += sum;
display();
}

```

```

void withdraw()
{

```

```

double sum;
Scanner sc = new Scanner(System.in);
System.out.println("Enter the amount you
want to Withdraw");
sum = sc.nextDouble();
balance -= sum;
if (balance > 1000)
    display();
else
{

```

```

    System.out.println("You cannot Withdraw
This much Amount");
}

```

```

void inter()
{

```

```

    System.out.println("Your Account Type is
not Eligible For any Interest");
}

```

```

}

```



```

class sav_acc extends account
{
    sav_acc(String n, String a, String t, double b)
    {
        super(n, a, t, b);
    }
    void display()
    {
        System.out.println("Name of the Account Holder is " + name + "\n");
        System.out.println("Account Number of the Account Holder is " + acc-no + "\n");
        System.out.println("Type of the Account of the Account Holder is " + type + "\n");
        System.out.println("Balance in your Account is " + the balance + "\n");
    }
    void withdraw()
    {
        double sum;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the amount you want to withdraw");
        sum = sc.nextDouble();
        balance -= sum;
        display();
    }
    void deposit()
    {

```



```

int sum;
Scanner sc = new Scanner(System.in);
System.out.println("Enter the principle amount  
you want to submit");
sum = sc.nextInt();
balance += sum;
display();
}

```

```

void inter()
{
    double r, t, interest, amount, power;
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter the Rate of interest");
    r = sc.nextDouble();
    System.out.println("Enter the year of time  
Account has to be elapsed");
    t = sc.nextDouble();
    power = Math.pow((1 + (r) / (100)), t);
    System.out.println(power);
    amount = balance * power;
    System.out.println(amount);
    interest = amount - balance;
    System.out.println("Interest Accumulated  
In your Account is " + interest);
    display();
}

```

```

void fin()
{
    System.out.println("You have no restriction on your  
min. balance. Thank You Sir");
}
}

```



```
class Bank
{
```

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

```
    {
```

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

```
        String name, acc-num, typ;
```

```
        int option;
```

```
        double bal;
```

```
        System.out.println("Enter the name of the  
account holder");
```

```
        name = sc.next();
```

```
        System.out.println("Enter the Account Number");
```

```
        acc-num = sc.next();
```

```
        typ = "Current Account";
```

```
        System.out.println("Enter the min-balance  
in the account");
```

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

```
        System.out.println("1: Current Account");
```

```
        System.out.println("2: Savings Account");
```

```
        System.out.println("3: Exit");
```

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

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

```
        switch(option)
```

```
        {
```

```
            case 1:
```

```
                curr-acc c = new curr-acc(name, acc-num,  
                typ, bal); a=c; int counter;
```



```
do  
{
```

```
    System.out.println("1: Check for Fine");  
    System.out.println("2: Deposit");  
    System.out.println("3: Withdraw");  
    System.out.println("4: Exit");  
    System.out.println("Enter your choice");  
    counter = sc.nextInt();  
    switch (counter)  
    {
```

```
        case 1: a.find();  
                break;
```

```
        case 2: a.deposit(); break;
```

```
        case 3: a.withdraw(); break;
```

```
        case 4: System.exit(0); break;
```

```
    }
```

```
    while (counter != 4)  
        break;
```

```
case 2:
```

```
new-acc s = new sav-acc(name, acc-number, type  
bal);
```

```
a = s;
```

```
int cnt;
```

```
do
```

```
{
```

```
    System.out.println("1: Deposit");
```

```
    System.out.println("2: Withdraw");
```

```
    System.out.println("3: Inhibit");
```

```
    System.out.println("4: Exit");
```



```
System.out.println("Enter your choice");  
switch (cns)  
{
```

```
    case 1: a.deposit(); break;  
    case 2: a.withdraw(); break;  
    case 3: a.inter();  
    case 4: System.exit(0); break;  
}
```

```
while (cns != 5), break;
```

```
    case 3:  
        System.exit(0);  
        break;
```

```
}
```

```
}
```

```
}
```