

```
import java.util.Scanner;
abstract class Account
{
    String name, acType;
    long accNo;
    double bal;
    final double minBal = 1000.0;
    Account (String name, long accNo, double bal,
             String acType)
    {
        this.accNo = accNo;
        this.name = name;
        this.bal = bal;
        this.acType = acType;
    }
    abstract void addBal (double amt);
    abstract void displayBal ();
}
```

```

abstract void withdrawBal(double amt);
}
class CurrAcct extends Account
{
    CurrAcct(String name, long accNo, double bal)
    {
        super(name, accNo, bal, "Current");
        System.out.println("Name: " + name + "\n"
            "AccNo: " + accNo + "\n Balance: "
            + bal + "\n Account Type: "
            + acctype);
    }
    void addBal(double amt)
    {
        this.bal += amt;
    }
    void displayBal()
    {
        System.out.println("The balance is: "
            + this.bal);
    }
    void checkBal()
    {
        if (this.bal < minBal)
        {
            System.out.println("Insufficient
                balance, service charge imposed");
            this.bal -= this.bal * 0.02;
        }
    }
    void withdrawBal(double amt)
    {

```

```
this.bal -= amt;  
checkBal();  
}
```

class Sav-act extends Account

```
{  
    Sav-act (String name, long accNo,  
             double bal)
```

```
{  
    super (name, accNo, Bal, " Savings");  
    System.out.println ("Name: " + name + " in  
                        AccNo: " + accNo + " in  
                        Balance: " + bal + " in Account  
                        Type: " + acctype);  
}
```

```
void addBal (double amt)
```

```
{  
    this.bal += amt;  
    addInts();  
}
```

```
void addInts()
```

```
{  
    int bcr = 2, R = 7;  
    this.bal = this.bal * (Math.pow(1 + (R/100), bcr));  
}
```

```
void displayBal()
```

```
{  
    System.out.println ("The balance is :"  
                        + this.bal);  
}
```

```
void withdrawBal (double amt)
```

```
{
```


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```
this.bal -= amt;  
}
```

```
}
```

```
class AccountMain
```

```
{
```

```
public static void main (String[] args) {  
Scanner sc = new Scanner (System.in);
```

```
double amt;
```

```
System.out.println ("Enter details:");
```

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

```
String n = sc.next();
```

```
System.out.println ("Account Number:");
```

```
long id = sc.nextLong();
```

```
while (true)
```

```
{
```

```
System.out.println ("Type of account:
```

```
1. Current account 2. Savings
```

```
account 3. Exit");
```

```
int o = sc.nextInt();
```

```
if (o == 1) {
```

```
System.out.println ("The current
```

```
Account provides cheque book
```

```
facility but no interest:");
```

```
curr-act cr = new Curr-act (n, id,  
20000);
```

```
while (true)
```

```
{
```

```
System.out.println ("1. Deposit 2. Display Balance 3. Withdraw
```

```
Amount 4. Exit");
```

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

```
switch (ch)
```

```
{
```

case 1:

System.out.println("Enter the amt to be added:");

amt = sc.nextDouble();

cr.addBal(amt);

break;

case 2:

cr.displayBal();

break;

case 3:

System.out.println("Enter the amt to be withdrawn:");

amt = sc.nextDouble();

cr.withdrawBal(amt);

break;

case 4:

System.exit(0)

default: System.out.println("Invalid choice");

}

}

}

else if (o == 2) {

System.out.println("The savings Account provides compound interest and withdrawal facilities but no cheque book facility.");

Sav-acc sw = new Sav-acc(n, c, 5000);

while (true)

{

System.out.println("1. Deposit
2. Display Balance
3. Withdraw Amount
4. Exit");


```

int ch = sc.nextInt();
switch (ch)
{
    case 1:
        System.out.println("Enter the amount to be added.");
        amt = sc.nextDouble();
        sv.addBal(amt);
        break;
    case 2:
        sv.displayBal();
        break;
    case 3:
        System.out.println("Enter the amount to be withdrawn.");
        amt = sc.nextDouble();
        sv.withdrawBal(amt);
        break;
    case 4:
        System.exit(0);
    default:
        System.out.println("Invalid choice");
}
}
else if (o == 0)
    System.exit(0);
else
    System.out.println("Invalid choice");
}
}
}

```