

```
import java.util.*;  
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 Account Number");
```

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

```
        System.out.println("Enter current Avail. balance");
```

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

```
    }
```

```
    void putd() {
```

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

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

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```
System.out.println ("Account number: " + acct no);  
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 has been deposited / balance 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");  
}
```

```
class Saving extends Account {
```

```
double rate;
```

```
double l-with;
```

```
int n;
```

```
int ch;
```

```
double amt;
```

```
double term;
```

```
double pr;
```

```
void ci() {
```

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

```
    System.out.println("Enter Principal deposit amount");
```

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

```
    System.out.println("Enter rate of interest");
```

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

```
    System.out.println("Enter term (years)");
```

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

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

```
void with-SC() {
```

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

```
    System.out.println("Enter money to be withdrawn");
```

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

```
    if (s_with > balance)
```

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

```
    else
```

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```
{ 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 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 has been withdrawn  
and Balance has been updated");}
```

```
if (balance < min) {
```

```
System.out.println ("Balance is below min threshold,  
service penalty charge = (pen).");
```



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```
System.out.println("Due to insufficient funds, penalty charge will  
be deducted from account after replenishing, current  
balance is "+ balance);
```

```
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 balance. "+ balance);
```

```
class lab5 {
```

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

```
int ch, chh;
```

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

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

```
System.out.println("Savings or current 1-savings 2-current");
```

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

```
if (ch == 1) { switch (chh) {
```

```
case 1:
```

```
s.dept();  
break;
```

```
case 2:
```

```
s.ci();  
break;
```

```
case 3:
```

```
s.withdraw();
```

```
break;
```

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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 cr = new Current();
```

```
cr.get('c');
```

```
do {
```

```
System.out.println("1. Deposit money In 2. Cheque Book
```

```
In 3. withdraw money In 4. Display Balance In 5. Exit");
```

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

```
switch (ch) {
```

```
case 1:
```

```
cr.depo();
```

```
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 (cch != 5);

} else System.out.println("Wrong!");

}

}