```
// Area using Abstract class
import java.util.*;
abstract class Shape{
    int a = 7;
    int b = 6;
abstract int printArea();
}

class Rectangle extends Shape{
    int printArea(){
        System.out.println("Area of rectangle is"
                + (a*b));

        return 0;

    }

}

class RightTriangle extends Shape{
    int printArea(){
    System.out.println("Area of right triangle is"+
                ((int)a*b*0.5));

        return 0;
    }

}
```

```
class Circle extends Shape{
    int printArea(){
    System.out.println("Area of rectangle is
                        + ((int)3.14*a*a));

    return 0;
    }
}
class Area{
public static void main(String args[]){
    Rectangle r = new Rectangle();
    RightTriangle t = new RightTriangle();
    Circle c = new Circle();
    Shape s;
    s = r;
    s.printArea();
    s = t;
    s.printArea();
    s = c;
    s.printArea();
    }
}
```

```
C:\Users\praji\Desktop\java>java Area
Area of rectangle is 42
Area of right triangle  is 21.0
Area of rectangle is 147
```

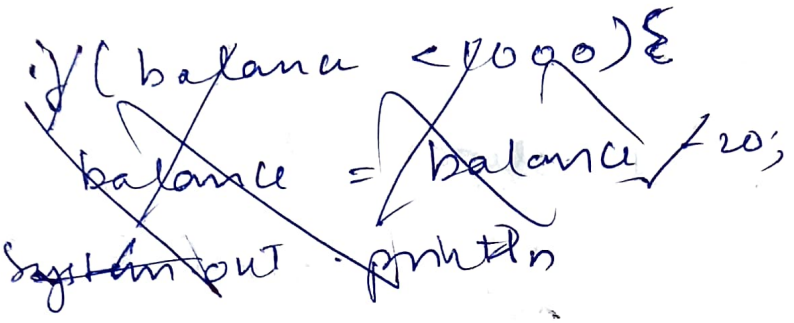
// Bank Account (Inheritance)

```
import java.util.*;
class Account{
    Scanner in = new Scanner(System.in);
    String cust_name;
    int acc_no;
    public int balance;
    int type_account;
    public int amount;

public void withdraw(){
    System.out.println("Enter ur account
                        balance:");
    balance = in.nextInt();
System.out.println("Enter the amount to be
                    withdrawn:");
    amount = in.nextInt();
        if(amount > balance){
    System.out.println("Insufficient Balance");
      display();
        }
    else {
      balance = balance - amount;
```

```
balance = balance - 20;
display();
}
}
}
public void deposit()
{
System.out.println("Enter ur acc balance");
balance = in.nextInt();
System.out.println("Enter the amount you
want to deposit:");
amount = in.nextInt();
balance = balance + amount;
display();
}
public void display()
{
System.out.println("your Account balance
is : " + balance);
}
}
```

```
class Current extends Account
{
                    withdraw
public void ~~Deposit~~()
{
```



```
if(balance <10000){
    balance = balance -20;
System.out.println
System.out.println("Enter ur account bal:");
Balance = in.nextInt();
System.out.println("Enter the amount to
                    be withdrawn:");
amount = in.nextInt();
    if (amount> balance{
System.out.println("Insufficient
                    Balance");
    display();
      }
    else {
    balance: balance - amount;
     if (balance < 10000){
        balance = balance-20;
System.out.println(" Service charge
    have been applied due
    to ~~less~~ bal less
        than min bal");
```

```
        displayCI();
        }
    }
}
class Saving extends Account {
public void computeInterest()
{
    int t;
    System.out.println("Enter ur ac bal:");
    balance = in.nextInt();
    System.out.println("Enter no time:");
    t = in.nextInt();
    balance = balance * (1+2*t);
    displayCI();
}
}
class Bank {
public static void main(String args[]){
    int choice;
Account a = new Account();
Current c = new Current();
Saving s = new Saving();
Scanner in = new Scanner(System.in);
```

```
for(;;){
System.out.println("Enter ur name:\n");
a.cust_name = in.next();
System.out.println("Enter ur Account:");
a.acc_no = in.nextInt();
System.out.println("Choose type of account:\n
                    1.Savings \n 2.Current");
a.type_account = in.nextInt();

System.out.println("Choose which operation
                    u want to perform:\n");
System.out.println("1.deposit \n 2.withdrawal
                    \n 3.deposit Interest
                    (only for savings)");

choice = in.nextInt();

switch(choice){
    case 1: if(a.type_account==2){
                c.deposit();
            }
            else{
                s.deposit();
            }
            break;
```

```
case 2: if (a.type-amount == 2) {
            c.withdraw();
            c.Penalty();
        }
        else {
            s.withdraw();
        }
        break;
case 3: s.computeInterest();
        break;
default: System.exit(0);
```

```
Enter ur name:

asd
Enter ur Account number:

123
Choose type of account :
 1.Savings
 2.Current

2
Choose which operation u want to perform:

 1.deposit
2.withdrawal
3.deposit Interest(Only for savings account)
2
Enter ur account balance:
900
Enter the amount u want to withdraw:
2
your Account balance is : 898
Balance is less than min bal hence service charge has been applied
your Account balance is : 878
Enter ur name:

1
Enter ur Account number:

123
Choose type of account :
 1.Savings
 2.Current

1
Choose which operation u want to perform:

 1.deposit
2.withdrawal
3.deposit Interest(Only for savings account)
1
Enter ur account balance:
789
Enter the amount u want to deposit:
34
your Account balance is : 823
Enter ur name:

asd
Enter ur Account number:
```

```
Enter ur Account number:

123
Choose type of account :
 1.Savings
 2.Current

1
Choose which operation u want to perform:

 1.deposit
2.withdrawal
3.deposit Interest(Only for savings account)
1
Enter ur account balance:
789
Enter the amount u want to deposit:
34
your Account balance is : 823
Enter ur name:

asd
Enter ur Account number:

123
Choose type of account :
 1.Savings
 2.Current

1
Choose which operation u want to perform:

 1.deposit
2.withdrawal
3.deposit Interest(Only for savings account)
3
Enter ur account balance:
3456
Enter the time interval:

2
your Account balance is : 17280
Enter ur name:
```