/\*Multiple inheritance using interface \*/

interface Area  
{  
float compute(float x, float y);  
}  
  
class Rectangle implements Area  
{  
public float compute(float x, float y)  
{  
return(x \* y);  
}  
}  
  
class Triangle implements Area  
{  
public float compute(float x,float y)  
{  
return(x \* y/2);  
}  
}  
  
class InterfaceArea  
{  
public static void main(String args[])  
{  
Rectangle rect = new Rectangle();  
Triangle tri = new Triangle();  
Area area;  
area = rect;  
System.out.println("Area Of Rectangle = "+ area.compute(1,2));  
  
area = tri;  
System.out.println("Area Of Triangle = "+ area.compute(10,2));  
}  
}

/\*Program to throw your own exception\*/

**class** MyException **extends** Exception {

**private** **int** detail;

MyException(**int** a) {

detail = a;

}

**public** String toString() {

**return** "MyException[" + detail + "]";

}

}

**public** **class** Main {

**static** **void** compute(**int** a) **throws** MyException {

System.out.println("Called compute(" + a + ")");

**if** (a > 10)

**throw** **new** MyException(a);

System.out.println("Normal exit");

}

**public** **static** **void** main(String args[]) {

**try** {

compute(1);

compute(20);

} **catch** (MyException e) {

System.out.println("Caught " + e);

}

}

}

/\* Program to catch multiple exception\*/

static class FirstException extends Exception { }

static class SecondException extends Exception { }

public void rethrowException(String exceptionName) throws Exception {

try {

if (exceptionName.equals("First")) {

throw new FirstException();

} else {

throw new SecondException();

}

} catch (Exception e) {

throw e;

}

}

/\*Program using finally block\*/

**class** TestFinallyBlock{

**public** **static** **void** main(String args[]){

**try**{

**int** data=25/5;

   System.out.println(data);

  }

**catch**(NullPointerException e){

System.out.println(e);

}

**finally**{System.out.println("finally block is always executed");

}

  System.out.println("rest of the code...");

}

  }

/\*Program about package of your own\*/

// packages/ex4/com/artima/vcafe/beverages/Coffee.java

package com.artima.vcafe.beverages;

public class Coffee {

private int temperature;

void changeTemperature(int delta) {

temperature += delta;

}

protected static final int bestTemperature = 50;

public void setTemperature(int temperature) {

this.temperature = temperature;

}

public int getTemperature() {

return temperature;

}

}