class Rectangle {

double length;

double width;

Rectangle() {

length = 1.0;

width = 1.0;

}

Rectangle(double length, double width) {

this.length = length;

this.width = width;

}

double computeArea() {

return length \* width;

}

double computePerimeter() {

return 2 \* (length + width);

}

}

class Cuboid extends Rectangle {

double height;

Cuboid() {

super();

height = 1.0;

}

Cuboid(double length, double width, double height) {

super(length, width);

this.height = height;

}

@Override

double computeArea() {

return 2 \* ((length \* width) + (width \* height) + (length \* height));

}

@Override

double computePerimeter() {

return 4 \* (length + width + height);

}

double computeVolume() {

return length \* width \* height;

}

}

public class TW5b{

public static void main(String[] args) {

Rectangle r1 = new Rectangle();

System.out.println("Rectangle 1:");

System.out.println("Area:" + r1.computeArea());

System.out.println("Perimeter:" + r1.computePerimeter());

Rectangle r2 = new Rectangle(10,30);

System.out.println("\nRectangle 2:");

System.out.println("Area:" + r2.computeArea());

System.out.println("Perimeter:" + r2.computePerimeter());

Cuboid c1=new Cuboid();

System.out.println("\nCuboid 1:");

System.out.println("Area:" + c1.computeArea());

System.out.println("Perimeter:" + c1.computePerimeter());

System.out.println("Volume:" + c1.computeVolume());

Cuboid c2=new Cuboid(10,30,40);

System.out.println("\nCuboid 2:");

System.out.println("Surface area:" + c2.computeArea());

System.out.println("Perimeter:" + c2.computePerimeter());

System.out.println("Volume:" + c2.computeVolume());

}

}