

```
1  class Box{  
3  v     Box(double length,double breadth,double height){  
4      l=length;  
5      b=breadth;  
6      h=height;  
7  
8    }  
9  v     double vol(){  
10     return (l*b*h);  
11   }  
12 }  
13 public class DemoBox{  
Run main | Debug main  
14 v     public static void main(String arg[]){  
15     Box b1=new Box(5,5,5);  
16     Box b2=new Box(6,6,6);  
17     System.out.println("The volume of the first box is"+b1.vol());  
18     System.out.println("The volume of the second box is "+b2.vol());  
19   }  
20 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

The volume of the first box is125.0
The volume of the second box is 216.0

```
import java.util.*;

class Quad {
    double a, b, c, d;

    void input() {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the coefficients a, b, and c:");
        a = sc.nextDouble();
        b = sc.nextDouble();
        c = sc.nextDouble();
    }

    void calcRoots() {
        d = (b * b) - (4 * a * c);
        double real = -b / (2 * a);

        if (d == 0) {
            System.out.println("The roots are real and equal: " + real);
        } else if (d > 0) {
            double root1 = (-b + Math.sqrt(d)) / (2 * a);
            double root2 = (-b - Math.sqrt(d)) / (2 * a);
            System.out.println("The roots are real and distinct:");
            System.out.println("Root 1: " + root1);
            System.out.println("Root 2: " + root2);
        } else {
            double imag = Math.sqrt(-d) / (2 * a);
            System.out.println("The roots are imaginary and complex:");
            System.out.println("Root 1: " + real + " + i" + imag);
            System.out.println("Root 2: " + real + " - i" + imag);
        }
    }
}

public class QuadRun {
    public static void main(String[] args) {
        Quad q = new Quad();
        q.input();
        q.calcRoots();
    }
}
```

```
C:\Users\bhagy\Documents\java programs>cd C:\Users\bhagy\Documents\java programs  
C:\Users\bhagy\Documents\java programs>javac QuadRun.java  
C:\Users\bhagy\Documents\java programs>java QuadRun  
Enter coefficients:  
2  
4  
2  
Root1=Root2=-1  
  
C:\Users\bhagy\Documents\java programs>java QuadRun  
Enter coefficients:  
2  
4  
5  
Root1:-1.0+ i1.224744871391589  
Root1:-1.0- i1.224744871391589  
  
C:\Users\bhagy\Documents\java programs>java QuadRun  
Enter coefficients:  
2  
-5  
2  
Root1:2.0  
Root2:0.5
```