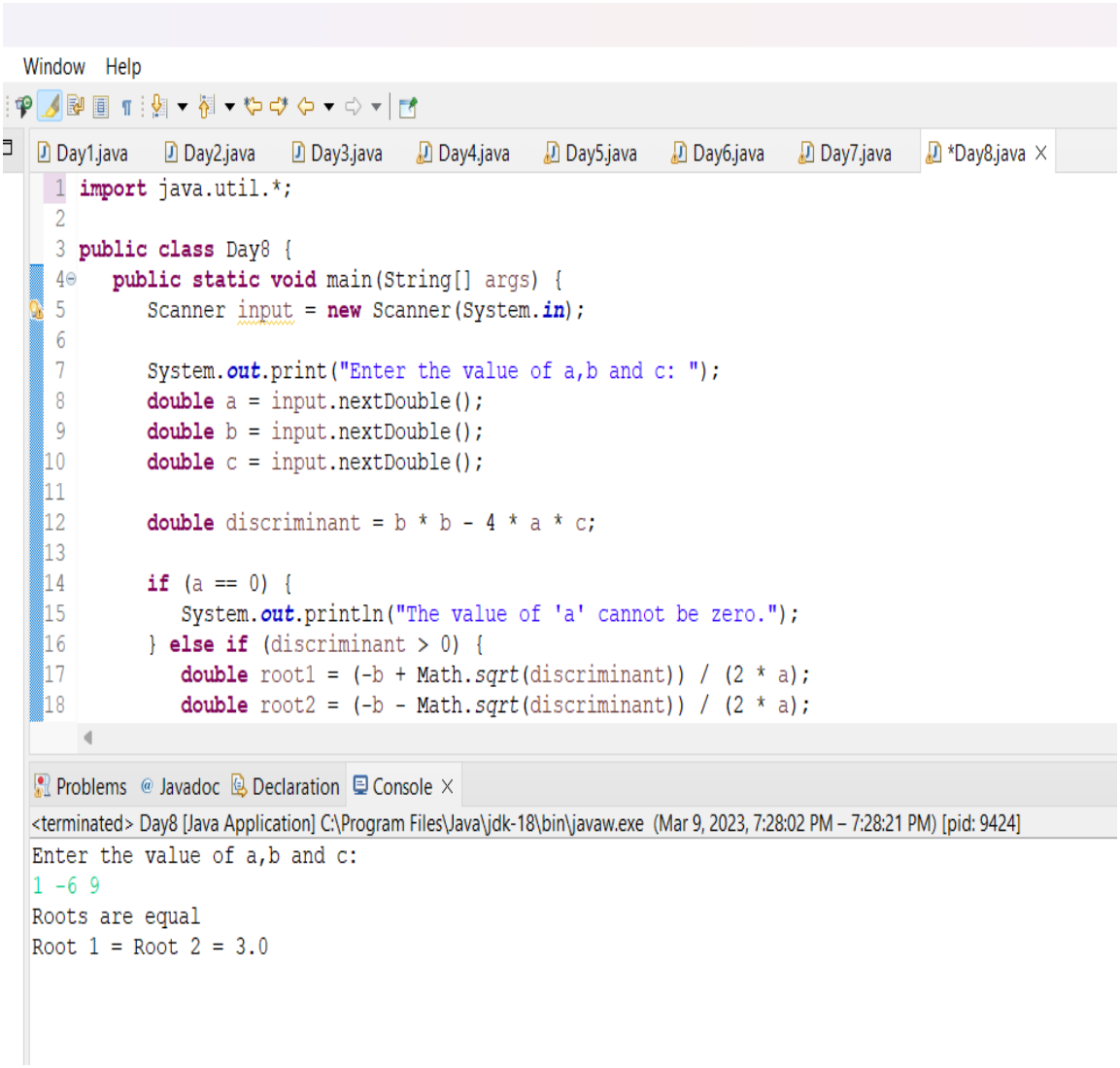
Day 8 coding Statement: Write a program to find roots of a quadratic equation

Program:

```
import java.util.*;

public class Day8 {
   public static void main(String[] args) {
      Scanner input = new Scanner(System.in);

      System.out.print("Enter the value of a,b and c: ");
      double a = input.nextDouble();
      double b = input.nextDouble();
      double c = input.nextDouble();

      double discriminant = b * b - 4 * a * c;

      if (a == 0) {
         System.out.println("The value of 'a' cannot be zero.");
      } else if (discriminant > 0) {
         double root1 = (-b + Math.sqrt(discriminant)) / (2 * a);
         double root2 = (-b - Math.sqrt(discriminant)) / (2 * a);
         System.out.println("The roots are " + root1 + " and " + root2);
      } else if (discriminant == 0) {
         double root = -b / (2 * a);
         System.out.println("Roots are equal");
         System.out.println("Root 1 = Root 2 = " + root);
      } else {
         System.out.println("The equation has no real roots.");
      }
   }
}
```

Output:


Window Help
Day1.java Day2.java Day3.java Day4.java Day5.java Day6.java Day7.java *Day8.java
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double a = input.nextDouble();
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double c = input.nextDouble();
double discriminant = b * b - 4 * a * c;
if (a == 0) {
System.out.println("The value of 'a' cannot be zero.");
} else if (discriminant > 0) {
double root1 = (-b + Math.sqrt(discriminant)) / (2 * a);
double root2 = (-b - Math.sqrt(discriminant)) / (2 * a);
Problems Javadoc Declaration Console
<terminated> Day8 [Java Application] C:\Program Files\Java\jdk-18\bin\javaw.exe (Mar 9, 2023, 7:28:02 PM – 7:28:21 PM) [pid: 9424]
Enter the value of a,b and c:
1 -6 9
Roots are equal
Root 1 = Root 2 = 3.0