

Date / /

```
import java.util.Scanner;  
public class quadratic main {
```

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

```
        // Taking input
```

```
        double a, b, c;
```

```
        Scanner input = new Scanner (System.in);
```

```
        System.out.println ("Enter the value of  
                             coefficients : \n");
```

```
        System.out.print ("a = ");
```

```
        a = input.nextDouble();
```

```
        System.out.print ("b = ");
```

```
        b = input.nextDouble();
```

```
        System.out.print ("c = ");
```

```
        c = input.nextDouble();
```

```
        // Declaring root variables
```

```
        double d = b*b - 4*a*c;
```

```
        // Checking for roots
```

```
        if (d > 0)
```

```
        { System.out.println ("Real and Distinct roots")
```

```
            r1 = (-b + Math.sqrt(d)) / (2*a);
```

```
            r2 = (-b - Math.sqrt(d)) / (2*a);
```

```
            System.out.println ("Roots are " + r1 + " and " + r2);
```

```
        }
```

```
        else
```

```
            System.out.println ("There are no real solutions")
```

```
        }
```

```
    }
```