```java
1    import java.util.*;
2    import java.lang.*;
3    public class quadratic{
4    public static void main(String[] args){
5    double a,b,c,r1=0,r2=0;
6    System.out.println("Enter coefficients a,b and c of quadratic equation:");
7    Scanner in = new Scanner(System.in);
8    a=in.nextFloat();
9    b=in.nextFloat();
10   c=in.nextFloat();
11   double d = (b*b)-(4*a*c);
12   if(d == 0)
13   {
14   System.out.println("Two equal real roots");
15   r1 = -b/2*a;
16   r2 = r1;
17   }
18   else if(d > 0)
19   {
20   System.out.println("Two distinct real roots");
21   r1 = -b + Math.sqrt(d)/2*a;
22   r2 = -b - Math.sqrt(d)/2*a;
23   }
24   else
25   {
26   System.out.print("No real roots");
27   System.exit(0);
28   }
29   System.out.println("Roots of quadratic equation are r1 ="+r1+" and r2 = "+r2);
30   }
31   }
32
```

JDK 11.04

Interactive

▶ Execute   •••   ⌗

Result

compiled and executed in 33.53 sec(s)

```
Enter coefficients a,b and c of quadratic equation:
3
4
1
Two distinct real roots
Roots of quadratic equation are r1 =-1.0 and r2 = -7.0
```