Source code:

```
import java.util.Scanner;


class Quad{

public static void main(String xx[]){


   int a,b,c;
   Scanner s=new Scanner(System.in);
   System.out.println("Enter the coefficients a,b,c");
   a=s.nextInt();
   b=s.nextInt();
   c=s.nextInt();
   double des=(b*b)-(4*a*c);
   double root1,root2;
   if(a==0){
    System.out.println("The equation is not quadratic\n");
}
else if(des>0){

     root1=-b+Math.sqrt(des);
     root2=-b-Math.sqrt(des);

    System.out.println("The roots are real and distinct\nroot 1:    "+root1+"\nroot 2:   "+root2);
}
else if(des==0){
      root1=root2=-b/(2*a);
     System.out.println("The roots are real and equal\nRoot 1:  "+root1+"\nroot 2:   "+root2);
}
else   {
     root1=-b/(2*a);
     root2=Math.sqrt(Math.abs(des));

    System.out.println("The roots are imaginary\nRoot1 :   "+root1+"i"+root2+"\nRoot 2:   "+root1+"-i"+root2);
    s.close();
       }

  }

}
```

OUTPUT:

```
PS C:\Users\Admin\Desktop\1BM21CS019> javac Quad.javaa
error: Class names, 'Quad.javaa', are only accepted if annotation processing is explicitly requested
1 error
PS C:\Users\Admin\Desktop\1BM21CS019> javac Quad.java
PS C:\Users\Admin\Desktop\1BM21CS019> java Quad
Enter the coefficients a,b,c
0 0 0
The equation is not quadratic

PS C:\Users\Admin\Desktop\1BM21CS019> java Quad
Enter the coefficients a,b,c
1 2 3
The roots are imaginary
Root1 :   -1.0+i2.8284271247461903
Root 2:   -1.0-i2.8284271247461903
PS C:\Users\Admin\Desktop\1BM21CS019> java Quad
Enter the coefficients a,b,c
1 4 1
The roots are real and distinct
root 1:    -0.5358983848622456
root 2:   -7.464101615137754
PS C:\Users\Admin\Desktop\1BM21CS019> java Quad
Enter the coefficients a,b,c
1 2 1
The roots are real and equal
Root 1:  -1.0
root 2:   -1.0
PS C:\Users\Admin\Desktop\1BM21CS019>
```