```
import java.lang.Math;
import java.util.Scanner;

class Quadratic{
int a, b, c;
double r1, r2;
Quadratic(){
System.out.println("Enter a, b and c from quadratic equation: ");
Scanner sc = new Scanner(System.in);
a = sc.nextInt();
b = sc.nextInt();
c = sc.nextInt();
}
double discriminant(){
return b*b-4*a*c;
}
void compute(){
if(discriminant() > 0){
r1 = (-b + Math.sqrt(discriminant()))/(double)(2*a);
r2 = (-b - Math.sqrt(discriminant()))/(double)(2*a);
System.out.println("The roots are unique");
System.out.println("First root: "+ r1);
System.out.println("Second root: "+ r2);
}
else if(discriminant() == 0){
r1 = -b/(2*a);
System.out.println("The roots are equal");
System.out.println("The root is: "+ r1);
}
else if(discriminant() < 0){
r1 = -b/(2*a);
r2 = (-b + Math.sqrt(-discriminant()))/(double)(2*a);
System.out.println("The roots are Imaginary");
System.out.println("First root: "+ r1 + "+i" + r2);
System.out.println("Second root: "+ r1 + "-i" + r2);

}
}
}


class Run{
public static void main(String[] args){
Quadratic eq1 = new Quadratic();
eq1.compute();
Quadratic eq2 = new Quadratic();
eq2.compute();
Quadratic eq3 = new Quadratic();
eq3.compute();
}
}
```

Command Prompt

```
Microsoft Windows [Version 10.0.22000.2538]
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C:\Users\Admin>cd desktop

C:\Users\Admin\Desktop>javac Run.java

C:\Users\Admin\Desktop>java Run
Enter a, b and c from quadratic equation:
1
2
1
The roots are equal
The root is: -1.0
Enter a, b and c from quadratic equation:
3
4
9
The roots are Imaginary
First root: 0.0+i0.9319438411042397
Second root: 0.0-i0.9319438411042397
Enter a, b and c from quadratic equation:
1
5
6
The roots are unique
First root: -2.0
Second root: -3.0

C:\Users\Admin\Desktop>ANNAS SHARIEFF 1BM23CS041
```