Develop a Java program that print all the real solutions to quadratic equation $ax^2+bx+c=0$, Read a,b,c. If the discriminate b^2-4ac is negative, display there are no real solutions

```
import Java.util.Scanner;
class QuadraticEq
    {
        public static void main (String XX[])
        {
            double a;
            double b;
            double c;
            double root1, root2;
Scanner SS = new Scanner (System.in);
System.out.print(" Enter values of a, b, c");
a = SS.nextDouble();
b = SS.nextDouble();
c = SS.nextDouble();
double determinant = b*b-4*a*c
  {
    if (a==0)
    System.out.print(" It is not a quadratic equation")
    else
        {
          if (determinant >0)
           {
             root1 = ((-b+Math.sqrt(determinant))/
                                          2*a);
             root2 = ((-b+Math.sqrt(determinant))/
                                          2*a);
             System.out.println(" The root are
               distinct and real ; "+root1+" and
                "+root2);
```

```
if (determinant ==0)
    {
      root1 = root2 = -b/2*a
      System. out. print (" The roots are equal
                                  "+root1);
    }
    if (determinant <0)
      {
        root1 = ((-b + Math.abs ( Math.sqrt
                    (determinant))) /2*a);
        root 2 = ((-b - Math.abs (Math. sqrt
                    (determinant ))) /2*a);
        system.out. print (" The roots are
                    imaginary :"+"i"+root1+ "
                    + "i"+root2);
      }
    }
  }
}
```

```
:\Users\Admin\Desktop\1BM21CS011>javac QuadraticEq1.java

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:\Users\Admin\Desktop\1BM21CS011>javac QuadraticEq1
rror: Class names, 'QuadraticEq1', are only accepted if annotation processing is explicitly requested
 error

:\Users\Admin\Desktop\1BM21CS011>java QuadraticEq1
rror: Could not find or load main class QuadraticEq1
aused by: java.lang.ClassNotFoundException: QuadraticEq1

:\Users\Admin\Desktop\1BM21CS011>javac QuadraticEq1.java

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:\Users\Admin\Desktop\1BM21CS011>java QuadraticEq1
nter the values of a,b,c0 0 0
t is not a quadratic equation
:\Users\Admin\Desktop\1BM21CS011>1 1 1
1' is not recognized as an internal or external command,
perable program or batch file.

:\Users\Admin\Desktop\1BM21CS011>111
111' is not recognized as an internal or external command,
perable program or batch file.

:\Users\Admin\Desktop\1BM21CS011>1
1' is not recognized as an internal or external command,
perable program or batch file.

:\Users\Admin\Desktop\1BM21CS011>java QuadraticEq1
nter the values of a,b,c1 1 1
he roots are imaginary:iNaN iNaN
:\Users\Admin\Desktop\1BM21CS011>java QuadraticEq1
nter the values of a,b,c1 4 3
he roots are distinct and real:-1.0and -3.0
:\Users\Admin\Desktop\1BM21CS011>java QuadraticEq1
nter the values of a,b,c0 1 2
t is not a quadratic equation
:\Users\Admin\Desktop\1BM21CS011>java QuadraticEq1
nter the values of a,b,c1 1 1
he roots are imaginary:iNaN iNaN
:\Users\Admin\Desktop\1BM21CS011>java QuadraticEq1
nter the values of a,b,c4 -4 1
he roots are equal:8.0
:\Users\Admin\Desktop\1BM21CS011>javac QuadraticEq1.java

:\Users\Admin\Desktop\1BM21CS011>java QuadraticEq1
nter the values of a,b,c0 2 3
t is not a quadratic equation
:\Users\Admin\Desktop\1BM21CS011>java QuadraticEq1
nter the values of a,b,c1 1 1
he roots are imaginary:i0.3660254037844386 i-1.3660254037844386
:\Users\Admin\Desktop\1BM21CS011>java QuadraticEq1
nter the values of a,b,c4 -4 1
he roots are equal:8.0
:\Users\Admin\Desktop\1BM21CS011>java QuadraticEq1
nter the values of a,b,c1 4 3
he roots are distinct and real:-1.0 and -3.0
:\Users\Admin\Desktop\1BM21CS011>
```