

```

package src.com;
// java program to find the root of the quadratic equation
import java.io.*;

import static java.lang.Math.*;

public class Day8 {

    static void findRoots(int a,int b, int c){

        // if a is 0 then quadratic but linear
        if(a==0){
            System.out.println("Invalid");
            return;
        }

        int d=b-4*a*c;
        double sqrt_val= sqrt(abs(d));

        if(d<0){
            System.out.println(" Roots are real and different ");

            System.out.println((double)(-b+sqrt_val)/(2*a)+"\n" + (double)(-b-sqrt_val)/(2*a));
        }
        else if(d==0){
            System.out.println(" Roots are real and same ");

            System.out.println(-(double)b/(2*a) + "\n" + -(double)b/(2*a));
        }
        else{
            System.out.println(" Roots are complex");

            System.out.println(-(double)b/(2*a) + " + i" + sqrt_val /(2*a) + "\n" + -(double)b/(2*a) + " - i"
                                + sqrt_val/(2*a));
        }
    }

    public static void main(String[] args) {
        int a=1, b=8,c=12;
        findRoots(a,b,c);
    }
}

```