

JAVALAB-1

```
import java.util.*;
import java.lang.*;

public class Main
{
    public static void main (String args[])
    {
        System.out.println("Enter the a,b,c  
quadratic equation:");
        Scanner scan = new Scanner (System.in);
        double a = scan.nextDouble();
        double b = scan.nextDouble();
        double c = scan.nextDouble();
        double d = (b*b) - (4*a*c);
        System.out.println("D = " + d);
        if (d == 0)
        {
            double r1 = b/(2*a);
            System.out.println("roots are real and distinct");
            System.out.println(r1);
        }
        else if (d > 0):
        {
            double r1 = (-b + Math.sqrt(d))/(2*a);
            double r2 = (-b - Math.sqrt(d))/(2*a);
```

```
System.out.println("Roots are real and distinct");
```

```
}
```

```
else
```

```
{
```

```
System.out.println("No real roots are present");
```

```
}
```

```
}
```

```
}
```




enter a,b,c of the quadratic equation:

1

2

3

$D = -8.0$

No real roots are present

...Program finished with exit code 0

Press ENTER to exit console.



input

enter a,b,c of the quadratic equation:

-4

-3

2

D = 41.0

The roots are real and distinct

-1.175390529679106 and 0.42539052967910607

...Program finished with exit code 0

Press ENTER to exit console. █