

quadratic - Notepad

File Edit Format View Help

```
import java.util.Scanner;

class quadratic{
public static void main(String args[])
{
float a,b,c,d;
int f;
System.out.println("Enter coefficient of x^2 and x and constant of a quadratic equation respectively");
Scanner ob = new Scanner(System.in);
a=ob.nextFloat();
b=ob.nextFloat();
c=ob.nextFloat();
if(a==0){System.out.println("Enter valid quadratic equation");System.exit(0);}
d=(float)((Math.pow(b,2))-(4*a*c));
if(d==0){System.out.println("The equation has two equal roots which are "+(b/(2*a)));}
if(d>0){System.out.println("The equation has two distinct real roots which are "+((-b)+(Math.sqrt(d))/(2*a)+" and "+((-b)-(Math.sqrt(d))/(2*a)) );}
if(d<0){System.out.println("The equation has two imaginary roots which are "+((-b)/(2*a)+" + i"+"(Math.sqrt(-d))/(2*a)+" and "+((-b)/(2*a)+" - i"+"(Math.sqrt(-d))/(2*a)+" )");}
}
}
```

```
Microsoft Windows [Version 10.0.18363.1082]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Shreeshan A>E:
E:\>cd "Java Practise"
E:\Java Practise>cd "001 Lab"
E:\Java Practise\001 Lab>cd "Lab-1 Programs"
E:\Java Practise\001 Lab\Lab-1 Programs>javac quadratic.java
E:\Java Practise\001 Lab\Lab-1 Programs>java quadratic
Enter coefficient of x^2 and x and constant of a quadratic equation respectively
1
5
3
The equation has two distinct real roots which are -0.6972243622680054 and -4.302775637731995
E:\Java Practise\001 Lab\Lab-1 Programs>_
```