

/*Develop a java program that prints all real solutions to the quadratic equation on $ax^2+bx+c = 0$. Read in a ,b ,c and use the quadratic formula. If the discriminate b^2-4ac is negative, display a message stating that there are no real solutions. */

```
import java.util.Scanner;

public class quadratic
{
    public static void main(String[] args)
    {
        Scanner sc =new Scanner(System.in);
        System.out.println("Enter the value of a: ");
        float a=sc.nextFloat();
        System.out.println("Enter the value of b: ");
        float b=sc.nextFloat();
        System.out.println("Enter the value of c: ");
        float c=sc.nextFloat();
        float d=b*b-4*a*c;
        if(d<0)
        {
            System.out.println("No real solutions");
        }
        else if(d>0)
        {
            float r1=(float)(-b+Math.sqrt(d))/(2*a);
            float r2=(float)(-b-Math.sqrt(d))/(2*a);
```

```
        System.out.println("The values of roots are real and distinct");  
        System.out.println("Root 1= "+r1);  
        System.out.println("Root 2= "+r2);  
    }  
else  
{  
    float r3=-b/(2*a);  
    System.out.println("Roots are real and equal");  
    System.out.println("Root: "+r3);  
}  
}  
}
```

OUTPUT:-

FileEditSelectionViewGoRunTerminalHelp

OOJAVA

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CHAT

TERMINAL

PS C:\Users\88nin\OneDrive\Documents\OOJAVA> & 'C:\Program Files\Java\jre-1.8\bin\java.exe' '-cp' 'C:\Users\88nin\AppData\Roaming\Code\User\workspaceStorage\4adb2a2142c21b587a630072dbc95c75\redhat.jav
a\jdt_ws\OOJAVA_ad619349\bin' 'quadratic'
• Enter the value of a:
3
Enter the value of b:
6
Enter the value of c:
3
Roots are real and equal
Root: -1.0
PS C:\Users\88nin\OneDrive\Documents\OOJAVA>

CHAT

Ask about your code

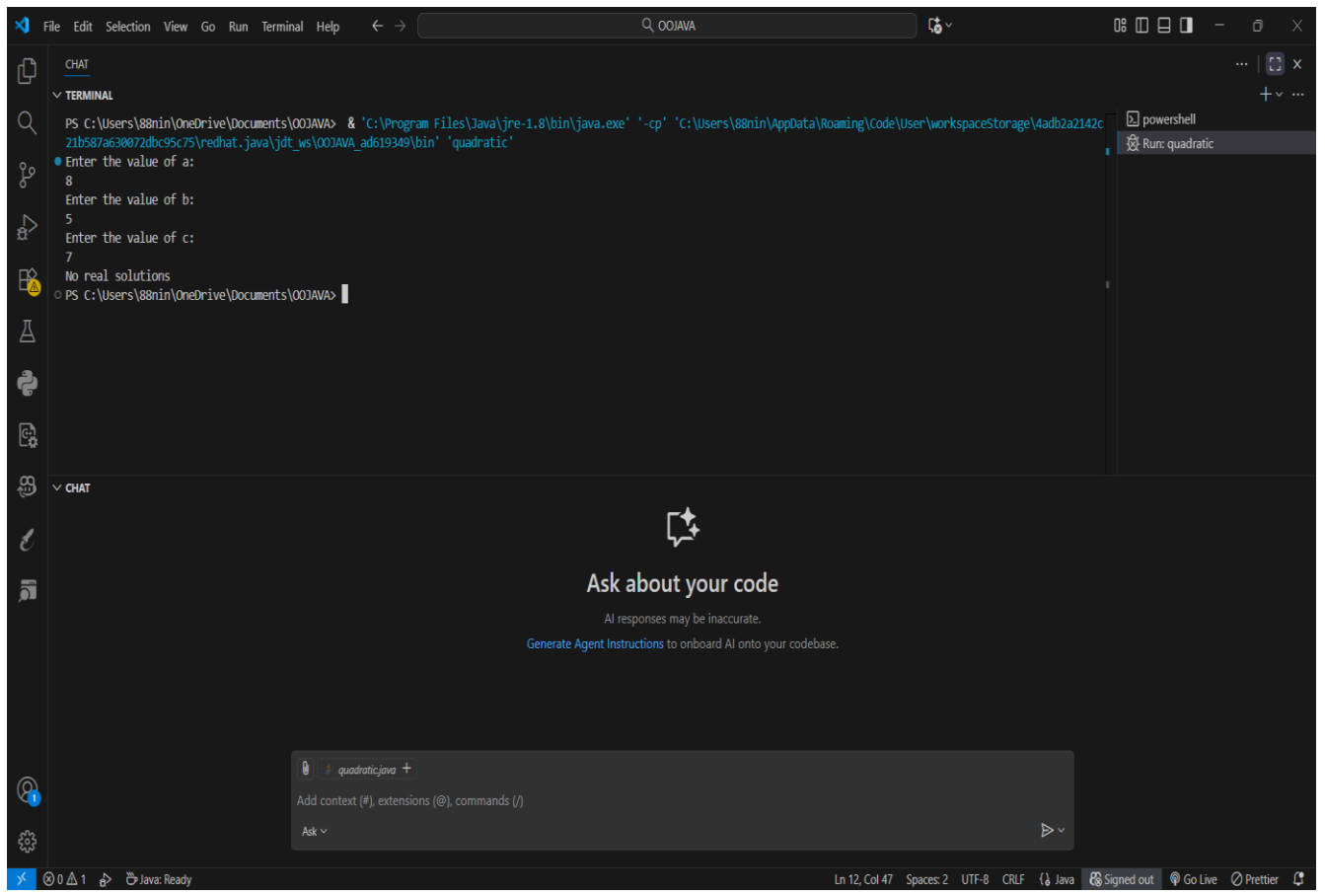
AI responses may be inaccurate.
Generate Agent Instructions to onboard AI onto your codebase.

quadratic.java +

Add context (#), extensions (@), commands (/)

Ask

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FileEditSelectionViewGoRunTerminalHelp

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CHAT

TERMINAL

PS C:\Users\88nin\OneDrive\Documents\OOJAVA> & 'C:\Program Files\Java\jre-1.8\bin\java.exe' '-cp' 'C:\Users\88nin\AppData\Roaming\Code\User\workspaceStorage\4adb2a2142c21b587a630072dbc95c75\redhat,.java\jdt_ws\OOJAVA_ad619349\bin' 'quadratic'

Enter the value of a:
2
Enter the value of b:
9
Enter the value of c:
4
The values of roots are real and distinct
Root 1= -0.5
Root 2= -4.0
PS C:\Users\88nin\OneDrive\Documents\OOJAVA>

powerShell
Run: quadratic

CHAT

Ask about your code

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quadratic.java

Add context (#), extensions (@), commands (/)

Ask

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Java: Ready

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