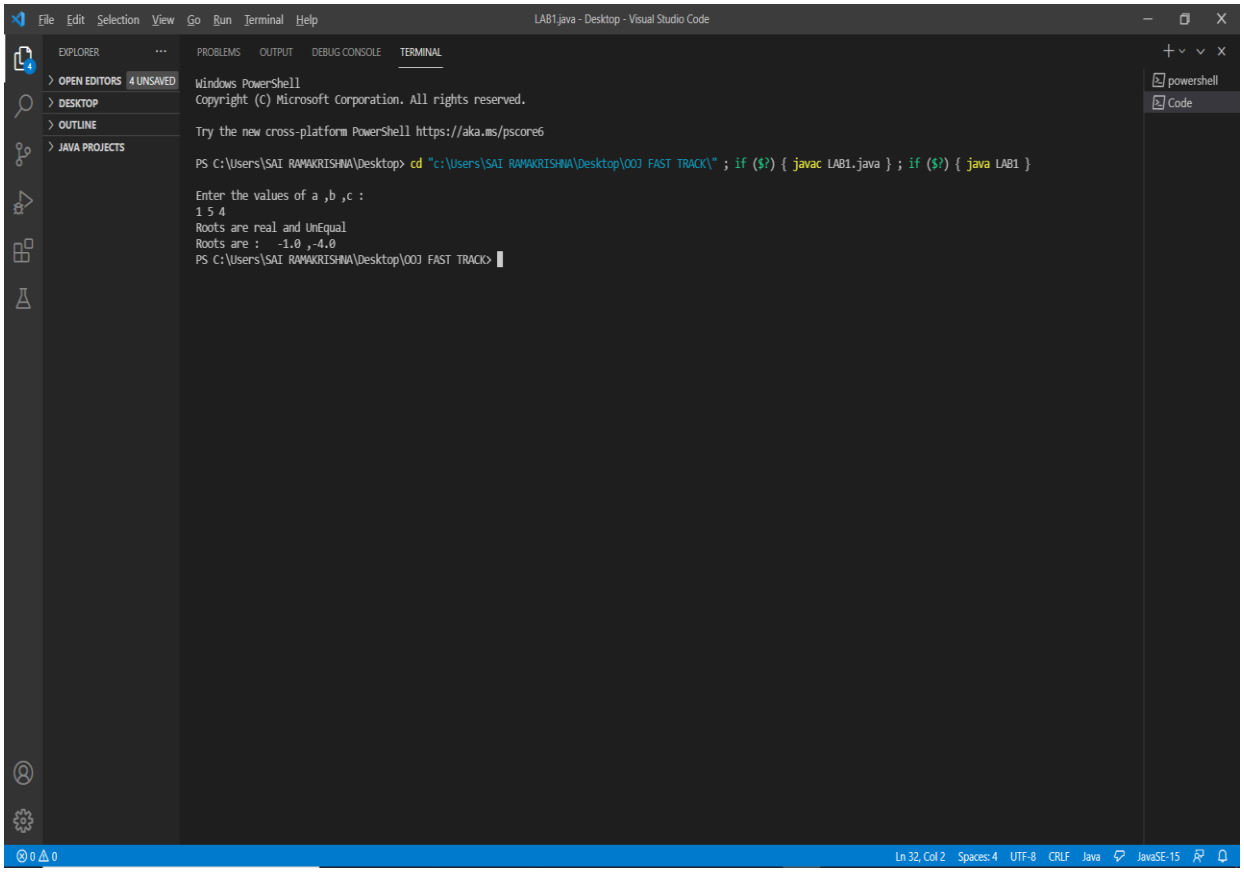
LAB PROGRAM1

Develop a Java program that prints all real solutions to the quadratic equation ax2+bx+c = 0. Read in a, b, c and use the quadratic formula. If the discriminate b2 -4ac is negative, display a message stating that there are no real solutions.

```
import java.util.Scanner;
class pro1
{
	public static void main(String args[])
	{
		int a,b,c,d,f=0;
		Scanner scr=new Scanner(System.in);
		System.out.println("\nEnter the values of a ,b ,c : ");
		a=scr.nextInt();
		b=scr.nextInt();
		c=scr.nextInt();
		d=(b*b)-(4*a*c);
		if(d==0)
		{
			System.out.println("Roots are real and Equal");
			f=1;
		}
		else if(d>0)
		{
			System.out.println("Roots are real and UnEqual");
			f=1;
		}
		else
		System.out.println("Roots are imaginary");
		if(f==1)
		{
```

```
                float r1=(float)(-b+Math.sqrt(d))/(2*a);
                float r2=(float)(-b-Math.sqrt(d))/(2*a);
                System.out.println("Roots are :   "+r1+" ,"+r2);
            }
        }
}
```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LAB1.java - Desktop - Visual Studio Code
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PS C:\Users\SAI RAMAKRISHNA\Desktop> cd "c:\Users\SAI RAMAKRISHNA\Desktop\OOJ FAST TRACK\" ; if ($?) { javac LAB1.java } ; if ($?) { java LAB1 }
Enter the values of a ,b ,c :
1 5 4
Roots are real and UnEqual
Roots are : -1.0 ,-4.0
PS C:\Users\SAI RAMAKRISHNA\Desktop\OOJ FAST TRACK>
powershell
Code
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