```
import java.util.*;
class lab3_1
{
	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);
```

```
            }
        }
    }
```

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19041.388]
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C:\Users\dell\OneDrive\Desktop\java\lab assignments>javac lab3_1.java

C:\Users\dell\OneDrive\Desktop\java\lab assignments>java lab3_1

Enter the values of a ,b ,c :
1
2
3
Roots are imaginary

C:\Users\dell\OneDrive\Desktop\java\lab assignments>java lab3_1

Enter the values of a ,b ,c :
1
8
2
Roots are real and UnEqual
Roots are :   -0.25834262 ,-7.7416573

C:\Users\dell\OneDrive\Desktop\java\lab assignments>java lab3_1

Enter the values of a ,b ,c :
-6
5
2
Roots are real and UnEqual
Roots are :   -0.29533365 ,1.128667

C:\Users\dell\OneDrive\Desktop\java\lab assignments>
```