

NAME: Ramya Pamesh

USN: 1BM19CH038

LAB Program 1

```
import java.util.* ;
class Quad {
    public static void main (String args[])
    {
        int a,b,c, count = 0;
        double D;
        Scanner sc = new Scanner(System.in)
        System.out.println("\n Enter the values
        of a,b,c:");
        a = sc.nextInt();
        b = sc.nextInt();
        c = sc.nextInt();
         $D = (b*b) - (4*a*c)$ ;
        if (D == 0)
        {
            System.out.println("\n Roots are real
            and equal");
            count = 1;
        }
        else if (D > 0)
        {
            System.out.println("\n Roots are real
            and distinct");
            count = 1;
        }
        else if (D < 0)
        {
            System.out.println("\n Roots are
            imaginary");
        }
    }
}
```

```
if (count == 1)
{
```

```
    double r1 = ((-b + Math.sqrt(D)) / (2 * a));
```

```
    double r2 = ((-b - Math.sqrt(D)) / (2 * a));
```

```
    System.out.println("Roots are : " + r1 +  
        " , " + r2);
```

```
}
```

```
}
```

```
}
```