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1BM19CS078

```
import java.util.*;
import java.lang.String;
class equation
{
    public static void main(String args[]){
        double r1=0,r2=0;
        Scanner root =new Scanner(System.in);
        System.out.print("Enter the value of a in ax^2+bx+c=0:");
        double a=root.nextDouble();
        System.out.print("Enter the value of b of ax^2+bx+c=0:");
        double b=root.nextDouble();
        System.out.print("Enter the value of c ax^2+bx+c=0:");
        double c=root.nextDouble();
        double n=2*a;
        double D=(b*b)-4*a*c;
        if(D>0)
        {
            System.out.println("solutions real and distinct");
            r1=(-b+ Math.sqrt(D))/n;
            r2=(-b- Math.sqrt(D))/n;
            System.out.println("solutions are");
            System.out.println(r1);
            System.out.println(r2);
        }
        else if(D==0)
        {
            System.out.println("solution real and equal");
            r1=r2=-b/n;
            System.out.println("solutions are");
            System.out.println(r1);
            System.out.println(r2);
        }
        else
        {
            System.out.println("NO real solutions");
        }
    }
}
```

```
root1 = -0.87+1.30i and root2 = -0.87-1.30i
```

```
..Program finished with exit code 0
```

```
Press ENTER to exit console.
```