

File Edit Format View Help

```
import java.util.Scanner;
```

```
class Equation
```

```
{
```

```
    public static void main(String args[])
```

```
    {
```

```
        int a,b,c;
```

```
        double d;
```

```
        double x1=0.0,x2=0.0;
```

```
        Scanner sc =new Scanner(System.in);
```

```
        System.out.println("Enter a, b and c of QE:  $ax^2+bx+c=0$ ");
```

```
        a=sc.nextInt();
```

```
        b=sc.nextInt();
```

```
        c=sc.nextInt();
```

```
        d=b*b-4*a*c;
```

```
        x1=(-b+Math.sqrt(d))/(2*a);
```

```
        x2=(-b-Math.sqrt(d))/(2*a);
```

```
        if(d>0)
```

```
        {
```

```
            System.out.println("real and distinct ");
```

```
            System.out.printf("solution: %.2f",x1);
```

```
            System.out.printf("          %.2f",x2);
```

```
        }
```

```
        if(d==0)
```

```
        {
```

```
            x1=x2=-b/(2*a);
```

```
            System.out.println("real and equal |");
```

```
            System.out.printf("Solution: %.2f",x1);
```

```
            System.out.printf("          %.2f",x2);
```

```
        }
```

```
        if(d<0)
```

```
        System.out.println("no real solutions");
```

```
    }
```

```
}
```

Command Prompt

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C:\Users\Amit R>javac assignment1.java

C:\Users\Amit R>java Equation

Enter a, b and c of QE: $ax^2+bx+c=0$

6

11

-35

real and distinct

solution:1.67 -3.50

C:\Users\Amit R>java Equation

Enter a, b and c of QE: $ax^2+bx+c=0$

1

1

2

no real solutions

C:\Users\Amit R>java Equation

Enter a, b and c of QE: $ax^2+bx+c=0$

2

4

2

real and equal

Solution:-1.00 -1.00

C:\Users\Amit R>