

lab week 3

Q) Finding solution to given quadratic equation.

Ans) `import java.util.Scanner`

```
public class Quadratic {
```

```
    public static void main (System args[]) {
```

```
        double a, b, c, d, f =
```

```
        double root1, root2;
```

```
        Scanner inp = new Scanner(System.in)
```

```
        System.out.println("Enter value of a, b & c");
```

```
        a = inp.nextDouble();
```

```
        b = inp.nextDouble();
```

```
        c = inp.nextDouble();
```

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

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

```
            System.out.println("Roots are real");
```

```
            root1 = (-b + Math.sqrt(d)) / (2 * a);
```

```
            root2 = (-b - Math.sqrt(d)) / (2 * a);
```

```
            System.out.println("Root1=" + root1 + "Root2=" + root2);
```

```
        } else if (d == 0) {
```

```
            System.out.println("roots are real & equal");
```

```
            root1 = root2 = -b / (2 * a);
```

```
        }
```

```
    } else {
```

```
        System.out.println("roots are imaginary");
```

```
    } } }
```

Fantastic