

Java prog

Q. To print real solutions of quadratic equation $ax^2 + bx + c = 0$. Read a , b and c & use quadratic formula. If discriminant $b^2 - 4ac$ is negative display a message stating that there are not real solutions.

```
import java.util.*;
```

```
class quadratic
```

```
{
```

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

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

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

```
        double d, r1, r2;
```

```
        System.out.println ("Enter values of a b and  
c in a quadratic equation");
```

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

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

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

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

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

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

```
        else
```

```
        {
            d = Math.sqrt (d);
```

```
            r1 = (-b + d) / (2.0 * a);
```

```
            r2 = (-b - d) / (2.0 * a);
```

```
            System.out.println ("roots are. " + r1 + " and "  
+ r2);
```

```
        }
```

```
    }
```

```
}
```