Lab 3
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WAP that prints all real solution to the quadratic
equation $ax^2 + bx + c = 0$
Read in a, b, c and use quadratic formula
If the discrete $b^2 - 4ac$ is negative, display
a message that there are no real solutions

```java
import java.util.Scanner;
public class main
{
    public static void main (String args [])
    {
        double d;
        double r1 = 0, r2 = 0;
        scanner sc = raw scanner (System.in);
        system.out.println ["Enter coefficient of a, b, c
        of your quadratic equation ax² + bx + c = 0"];

            double  a = sc.new double();
            double  b = sc.new double();
            double  c = sc.new double();

            d = [b * b] - [4 * a * c];
        if (d > 0)
            {
                system.out.println ["Roots are equal real");
                r1 = (-b + Math.sqrt(d)) / [2 * a];
                r2 = [-b + math.sqrt[d]) / [2 * a]);
                system.out.println ["Root 1:"+r1+"Root
                                     + r2];

    }
```

Scanned with CamScanner

```java
else if (d == 0)
{
    system.out.println ["Root are real and equal");
        r₁ = r₂ = -b/(2+a);
}
else
    { system.out.println ["Root are imaginary and no
                          val solution exists);
```
}
}
}