

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

```
class quad {
```

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

```
{
    System.out.println("Enter the coefficients a & b & c of quadratic  
equation  $ax^2 + bx + c = 0$  and where  $a \neq 0$ ");
```

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

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

```
    if (a == 0)
```

```
{
        System.out.println("a can't be zero");
```

```
    }
```

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

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

```
        double z = b*b - 4*a*c;
```

```
        Equation eq = new Equation();
```

```
        if (z < 0)
```

```
{
```

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

```
        }
```

```
        else if (z == 0)
```

```
{
```

System.out.println ("The solutions are real and equal ");

eg. check (a, b, c);

eg. display ();

}

else

{

System.out.println ("The solutions are real and distinct");

eg. check (a, b, c);

eg. display ();

}

}

}

}

class Equation

{

double a;

double b;

double c;

double r1;

double r2;

void check (double a, ~~double~~ double b, double c)

{

this.a = a

this.b = b

this.c = c;

double z = Math.pow (b*b - 4*a*c, 0.5);

r1 = (-b - z) / (2*a);

r2 = (-b + z) / (2*a);

int

}
void display()

{
system.out.println(a1);
system.out.println(a2);
}

d