

1) Output:

3) ~~Program~~ Enter two nos:

2

4

Sum: 6

Difference: -2

2) Output:

Enter two nos:

5

7

Product: 35

3) Program that prints all real solutions to quadratic equation $ax^2 + bx + c = 0$. Read a, b, c & use quadratic formula. If the discriminant $b^2 - 4ac$ is negative, display a message stating there are no real solutions.

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

```
class Quadratic
```

```
{
```

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

```
{
```

```
double a, b, c, d, r1, r2;
```

```
System.out.println ("Enter coefficients a, b, c ");
```

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

```

a = 10. next Double ();
b = 10. next Double ();
c = 10. next Double ();

```

```

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

```

```

if (d > 0.0)

```

```

{

```

```

double r1 = (-b + Math.pow(d, 0.5)) / (2.0 * a);

```

```

double r2 = (-b - Math.pow(d, 0.5)) / (2.0 * a);

```

```

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

```

```

}

```

```

else if (d == 0.0)

```

```

{

```

```

double r1 = -b / (2.0 * a);

```

```

System.out.println ("Root is : " + r1);

```

```

}

```

```

else

```

```

{

```

```

System.out.println ("No real solutions");

```

```

}

```

```

}

```

```

}

```

Out put:

Enter coefficients:

3

4

6

No real coefficients

Signature
11/10/2021


```

a = 10.0 * Math.pow(10, 0.5);
b = 10.0 * Math.pow(10, 0.5);
c = 10.0 * Math.pow(10, 0.5);

```

```

d = b*b - 4*a*c;
if (d > 0.0)
{
    double r1 = (-b + Math.pow(d, 0.5)) / (2.0 * a);
    double r2 = (-b - Math.pow(d, 0.5)) / (2.0 * a);
    System.out.println("Root are " + r1 + " and " + r2);
}

```

```

else if (d == 0.0)
{
    double r1 = -b / (2.0 * a);
    System.out.println("Root is : " + r1);
}

```

```

else
{
    System.out.println("No real solutions");
}

```

```

}

```

```

}

```

```

}

```

```

}

```

```

}

```

```

}

```

```

}

```

Output:

Enter coefficients:

3

4

6

No real coefficients

o/p Seen

gk

9/10/24