# JAVA - ATAN2() METHOD

## Description:

The method Converts rectangular coordinates (x, y) to polar coordinate (r, theta) and returns theta.

## Syntax:

```
double atan2(double y, double x)
```

## Parameters:

Here is the detail of parameters:

- **X** -- X co-ordinate in double data type

- **Y** -- Y co-ordinate in double data type

## Return Value:

- This method Returns theta from polar coordinate (r, theta)

## Example:

```java
public class Test{

   public static void main(String args[]){
      double x = 45.0;
      double y = 30.0;

      System.out.println( Math.atan2(x, y) );
   }
}
```

This produces the following result:

```
0.982793723247329
```