Java Comments

In computer programming, comments are a portion of the program that are completely ignored by Java compilers. They are mainly used to help programmers to understand the code. For example,

```java
// declare and initialize two variables
int a =1;
int b = 3;

// print the output
System.out.println("This is output");
```

Here, we have used the following comments,

- declare and initialize two variables

- print the output

Types of Comments in Java

In Java, there are two types of comments:

- single-line comment

- multi-line comment

Single-line Comment

A single-line comment starts and ends in the same line. To write a single-line comment, we can use the `//` symbol. For example,

```
// "Hello, World!" program example

class Main {
    public static void main(String[] args) {
        // prints "Hello, World!"
        System.out.println("Hello, World!");
    }
}
```
Run Code

Output:

```
Hello, World!
```

Here, we have used two single-line comments:

- `"Hello, World!" program example`

- `prints "Hello World!"`

The Java compiler ignores everything from `//` to the end of line. Hence, it is also known as **End of Line** comment.

Multi-line Comment

When we want to write comments in multiple lines, we can use the multi-line comment. To write multi-line comments, we can use the /*....*/ symbol. For example,

```
/* This is an example of  multi-line comment.
 * The program prints "Hello, World!" to the standard output.
 */

class HelloWorld {
    public static void main(String[] args) {

        System.out.println("Hello, World!");
    }
}
```
Run Code

Output:

```
Hello, World!
```

Here, we have used the multi-line comment:

```
/* This is an example of multi-line comment.
* The program prints "Hello, World!" to the standard output.
*/
```

This type of comment is also known as **Traditional Comment**. In this type of comment, the Java compiler ignores everything from `/*` to `*/`.

Use Comments the Right Way

One thing you should always consider that comments shouldn't be the substitute for a way to explain poorly written code in English. You should always write well structured and self explaining code. And, then use comments.

Some believe that code should be self-describing and comments should be rarely used. However, in my personal opinion, there is nothing wrong with using comments. We can use comments to explain complex algorithms, regex or scenarios where we have to choose one technique among different technique to solve problems.