

## 10. Comments in Java

The Java comments are the statements in a program that are not executed by the compiler and interpreter.

### Why do we use comments in a code?

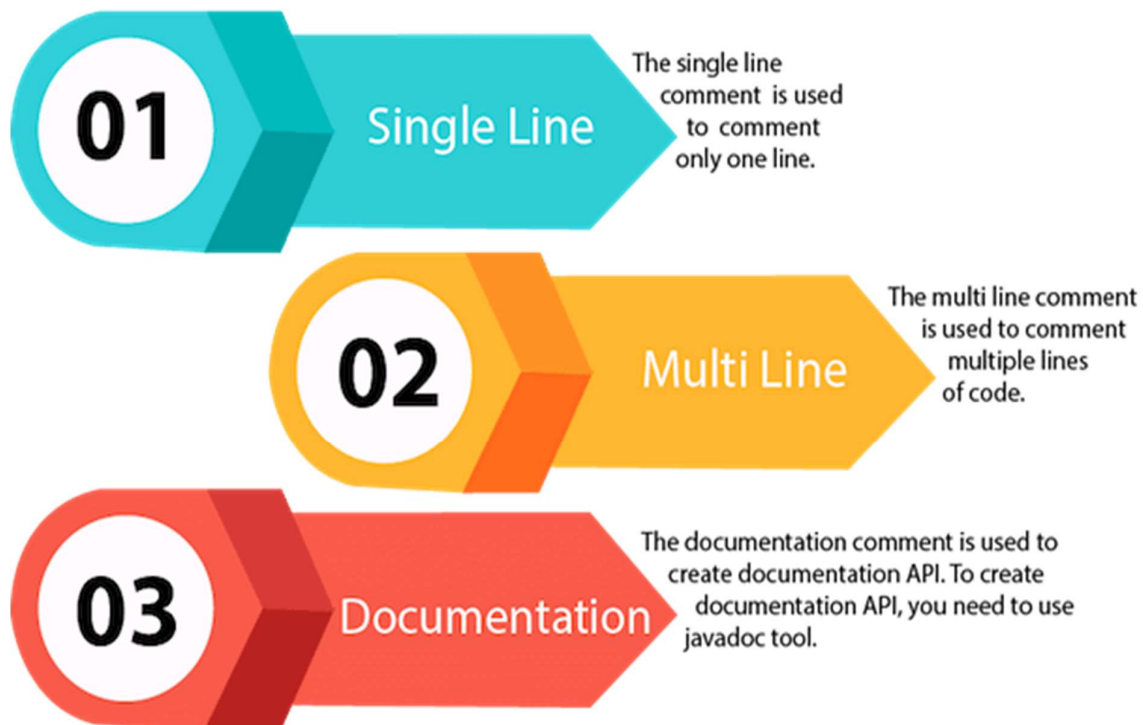
- Comments are used to make the program more readable by adding the details of the code.
- It makes easy to maintain the code and to find the errors easily.
- The comments can be used to provide information or explanation about the variable, method, class, or any statement.
- It can also be used to prevent the execution of program code while testing the alternative code.

### Types of Java Comments

There are three types of comments in Java.

1. Single Line Comment
2. Multi Line Comment
3. Documentation Comment

### Types of Java Comments



## 10.1 Java Single Line Comment

The single-line comment is used to comment only one line of the code. It is the widely used and easiest way of commenting the statements. Single line comments starts with two forward slashes (//). Any text in front of // is not executed by Java.

### Syntax:

```
//This is single line comment
```

### Single Line Comment Example:

```
public class SingleLineCommentExample
{
    public static void main(String[] args)
    {
        int i=10; // i is a variable with value 10
        System.out.println(i); //printing the variable i
    }
}
```

### Output:

```
10
```

## 10.2 Java Multi Line Comment

The multi-line comment is used to comment multiple lines of code. It can be used to explain a complex code snippet or to comment multiple lines of code at a time (as it will be difficult to use single-line comments there). Multi-line comments are placed between /\* and \*/. Any text between /\* and \*/ is not executed by Java.

### Syntax:

```
/*
This
is
multi line
comment
*/
```

### Multi Line Comment Example:

```
public class MultiLineCommentExample
{
    public static void main(String[] args)
    {
        /* Let's declare and
        print variable in java. */
        int i=10;
        System.out.println(i);
        /* float j = 5.9;
```

```
        float k = 4.4;  
        System.out.println( j + k ); */  
    }  
}
```

**Output:**

```
10
```

### 10.3 Java Documentation Comment

Documentation comments are usually used to write large programs for a project or software application as it helps to create documentation API. These APIs are needed for reference, i.e., which classes, methods, arguments, etc., are used in the code.

To create documentation API, we need to use the javadoc tool . The documentation comments are placed between `/**` and `*/`.

**Syntax:**

```
/**  
 *  
 *We can use various tags to depict the parameter  
 *or heading or author name  
 *We can also use HTML tags  
 *  
 */
```