

Program Comments

The main purpose of program comments is to explain the code, which help others understand the program, or to remind yourself how the program works at a later time. Contents within the comments are ignored by the compiler and will not be run. Therefore comments can also be used to prevent execution when testing.

In Java, there are two ways to insert comment in the code.

Single-line Comments

Single-line comments start with two forward slashes (//).

Any text between // and the end of the line is ignored by the Java compiler and will not be executed.

Example 1:

```
// Output a greeting to standard output
System.out.println("Hello World");
```

Example 2:

```
System.out.println("Hello World"); // Output a greeting to standard output
```

Multi-line Comments

Multi-line comments start with /* and ends with */. Any text between /* and */ is ignored by the Java compiler. This is useful when you need to insert a block of comment to explain the code.

Example:

```
/* The code below will print the words Hello World
to the screen. How nice! */
System.out.println("Hello World");
```

Javadoc Comments

Javadoc is a documentation tool which defines a standard format for comments in Java code and generates API documentations in HTML format.

In general, Javadoc comments are any multi-line comments (/** ... */) that are placed before class, field, or method declarations. Note the beginning is a slash and two stars.

```
/**
 * Greeting class which outputs a greeting
 * "Hello World" to the screen
 */
```

```
public class Greeting {  
    public static void main (String[] args) {  
        System.out.println("Hello World");  
    }  
}
```