

What is Comments and Python ?

In Python, comments are used to annotate code with explanations, notes, or reminders.

Comments are ignored by the Python interpreter during program execution and Python supports two types of comments: They are single-line comments and multi-line comments.

1. Single-line comments:

Single-line comments begin with the hash character (#) and continue until the end of the line.

Anything after the hash character on that line is considered a comment.

For example:

```
>>> # This is a single-line comment
```

```
>>> print("Hello, World!") # This is also a comment
```

2. Multi-line comments:

Python does not have built-in multi-line comment syntax like some other programming languages, such as C or Java.

However, you can achieve multi-line comments, in Python by enclosing multiple lines of text within triple quotes (""" or """).

Although not technically comments, Python treats these triple-quoted strings as literals and ignores them unless they are assigned to a variable or used as docstrings (documentation strings).

For example:

```
'''  
This is a multi-line comment.  
It spans across multiple lines.
```

```
'''  
''''
```

This is also a multi-line comment.

It can be enclosed in triple single quotes or triple double quotes.

```
"""
```

```
print("Hello, World!")
```

While triple-quoted strings can serve as a workaround for multi-line comments, they are generally used more commonly for docstrings to provide documentation for modules, classes, functions, or methods.