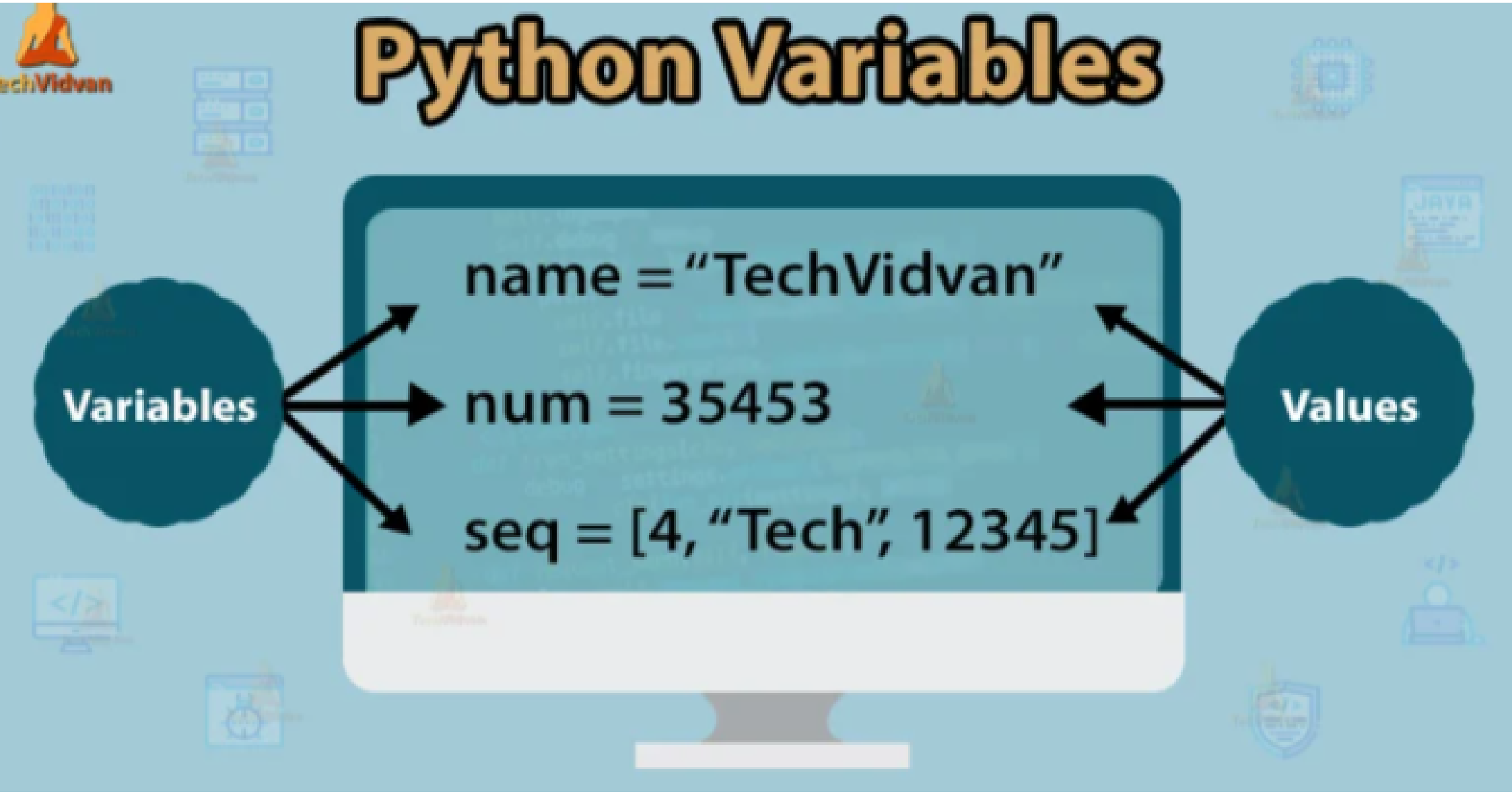
Python


Python Variables
name = "TechVidvan"
num = 35453
seq = [4, "Tech", 12345]
Variables
Values

Python Variables

Python Variables are containers which store values Python is not a static type. We do not need to declare variables before using them or declare their type. A Python variable name is given to a memory location.

Note :

The value stored in a variable can be changed during program execution. A Python Variables is only a name given to a memory location, all the operations done on the variable effects that memory location.

Rules for creating variables in Python

- A variable name must start with a letter or the underscore character.
- A variable name cannot start with a number.
- A variable name can only contain alpha- numeric characters and underscores (A-z, 0- 9, and _).
- Variable names are case-sensitive (name, Name and NAME are three different variables).
- The reserved words (keywords) cannot be used naming the variable.

Declaring a variable :

Let's see how to declare the variable and print the variable.

```
1  #declaring the value
2  variable = "Hey!"
3  #to display
4  print(variable)
```

Output :

```
Hey!
>
```

Redeclaring a Variable :

We can re-declare the python variable once we have declared the variable already.

```
1  #declaring the value
2  variable = "Hey!"
3  #to display
4  print(variable) #before re-declaration
5  #re-declaring the variable
6  variable = "Hello!"
7  print(variable)
```

Output :

```
Hey!
Hello!
>
```

Assigning a single value to multiple variables

Also, Python allows assigning a single value to several variables simultaneously with "=" operators.

```
1  a=b=c=10
2  print(a)
3  print(b)
4  print(c)
```

Output :

```
10
10
10
>
```

Assigning different values to multiple variables

Python allows adding different values in a single line with ","operators.

```
1  a,b,c = 'hii' , 10 , 10.5
2  print(a)
3  print(b)
4  print(c)
```

Output :

```
hii
10
10.5
>
```

PYTHON COMMENTS

LEARN ABOUT PYTHON SINGLE AND MULTI-LINES COMMENTS

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Comments in Python

Comments in Python is the inclusion of short descriptions along with the code to increase its readability. A developer uses them to write his or her thought process while writing the code. It explains the basic logic behind why a particular line of code was written. They are just meant for the coders themselves or other developers to understand a piece of code, especially since the Python interpreter completely ignores comments in Python. You can see this in the following example.

There are multiple uses of writing comments in Python. Some significant uses include:

- Increasing readability
- Explaining the code to others
- Understanding the code easily after a long-term
- Including resources
- Re-using the existing code

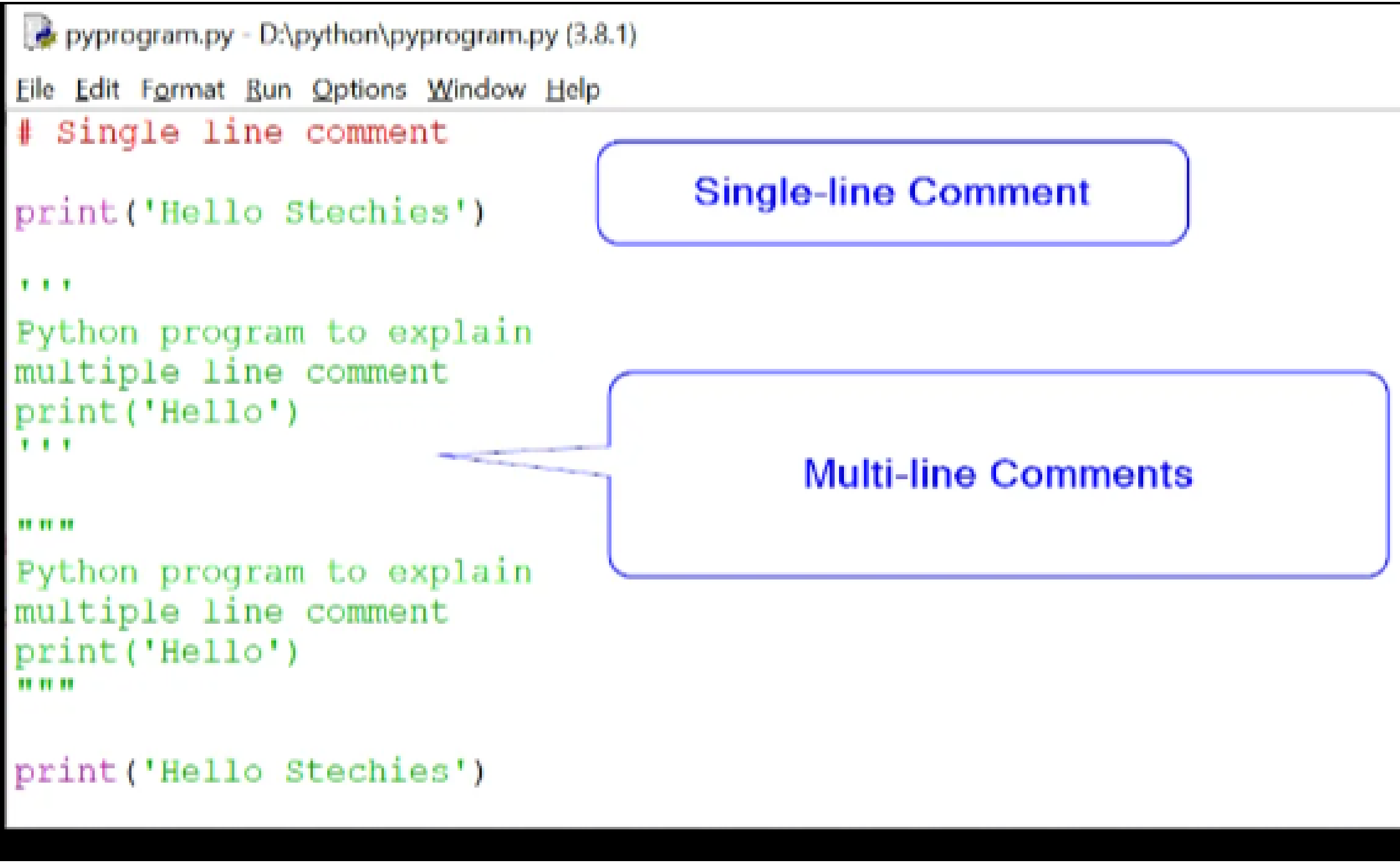
What Are the Advantages of Using Comments in Python?

Comments in Python provide numerous advantages. Their primary benefits include:

- Makes the code easily understandable by other programmers
- The code becomes self-explanatory
- Helps remember why we used a specific command, method, or function in the code
- Enables the interpreter to ignore some part of the code while testing

Python Comments

- To make the code much more readable.
- Python Interpreter ignores comment.
- Two types of comment is possible in python:
  - Single line comment and
  - Multi-line comment


pyprogram.py - D:\python\pyprogram.py (3.8.1)
File Edit Format Run Options Window Help
# Single line comment
print('Hello Stechies')
'''
Python program to explain
multiple line comment
print('Hello')
'''
"""
Python program to explain
multiple line comment
print('Hello')
"""
print('Hello Stechies')
Single-line Comment
Multi-line Comments