**All About Python Variables 🧠💡**

In programming, a variable is a container (storage area) to hold data. For example,

number = 10

Here, the **number** is the variable storing the value **10**.

**Assigning values to Variables in Python**

As we can see from the above example, we use the assignment operator = to assign a value to a variable.

site\_name = "Power Learn Project"

print(site\_name)

In the above example, we assigned the value ‘Power Learn Project’ to the site\_name variable. Then, we printed out the value assigned to site\_name.

**Note**: Python is a type-inferred language, so you don't have to explicitly define the variable type. It automatically knows that Power Learn Projects is a string and declares the site\_name variable as a string.

**Changing the Value of a Variable in Python**

site\_name = "Power Learn Project"

print(site\_name)

# Assigning new value to site\_name

site\_name = "I love coding 😊"

print(site\_name)

# The output will be

Power Learn Project

I love coding 😊

Here, the value of site\_name is changed from ‘Power Learn Project’ to 'I love coding 😊'.

**Example: Assigning multiple values to multiple variables**

a,b,c = 5, 7, "Hello world"

print(a) # prints 5

print(b) # prints 5

print(c) # prints Hello World

**Rules for Naming Python Variables**

* Constant and variable names should have a combination of letters in lowercase (a to z) or uppercase (**A to Z**) or digits (**0 to 9**) or an underscore (**\_**). For example:

* snake\_case
* MACRO\_CASE
* camelCase
* CapsWords

* Python is case-sensitive. So num and Num are different variables. For example,

num = 55

Num = 510

print(num) #5

print(Num) #510

* Avoid using keywords like if, True, class, etc. as variable names.

More Resources:

1. <https://realpython.com/python-variables/>
2. <https://www.simplilearn.com/tutorials/python-tutorial/python-variables>
3. <https://www.guru99.com/variables-in-python.html>
4. <https://www.tutorialspoint.com/python/python_variables.htm>