Python - Variable Types

Variables are nothing but reserved memory locations to store values.

This means that when you create a variable you reserve some space in memory.

Based on the data type of a variable,

the interpreter allocates memory and decides what can be stored in the reserved memory.

Therefore, by assigning different data types to variables, you can store integers,

decimals or characters in these variables.

Rules for Python variables:

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 (age, Age and AGE are three different variables)

NOTE => Remember that variables are case-sensitive

Types of Variable

1. Local Variables
2. Global Variables
3. Class Variables

Assigning Values to Variables

Python variables do not need explicit declaration to reserve memory space.

The declaration happens automatically when you assign a value to a variable.

The equal sign (=) is used to assign values to variables.

The operand to the left of the = operator is the name of the variable and

the operand to the right of the = operator is the value stored in the variable.

EG=>

```
a   = 100        # integer assignment

b   = 1000.0     # floating point

c   = "John"     # string


print(a)

print(b)

print(c)
```

Multiple Assignment

Python allows you to assign a single value to several variables simultaneously. For example -

```
a = b = c = 10
```

INPUT()

The input() method reads a line from input, converts into a string and returns it.

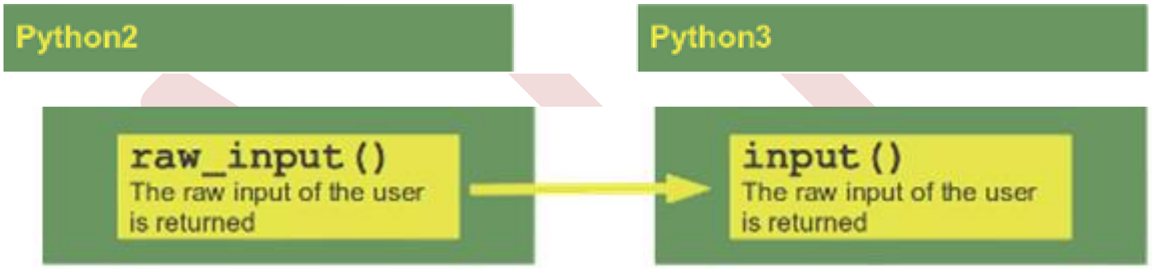
The syntax of input() method is:

input([prompt])

input() Parameters

The input() method takes a single optional argument:

prompt (Optional) - a string that is written to standard output (usually screen) without trailing newline


Python2
Python3
raw_input()
The raw input of the user is returned
input()
The raw input of the user is returned

Return value from input()

The input() method reads a line from input (usually user),
converts the line into a string by removing the trailing newline and returns it.

EG=> static condition

```python
# static condition

shirt = 500

oil = 100

pant = 700


print('Total Amount is ',(shirt+oil+pant))
```