

# LEARN PYTHON PROGRAMMING

- Comments increase readability or understand-ability of program.

## Comments in Python

1. Single-line comment
2. Multi-line comment

### 1. Single Line Comment

```
#To add numbers  
a=10 #store 10 into variable a
```

### 2. Multi-line Comment or Block Comments

Triple double quotes `"""` or triple single quotes `'''`

**For Example:**

```
"""  
This is python lecture.  
Next lecture is on Thursday.  
"""  
  
'''  
This is python lecture.  
Next lecture is on Thursday.  
'''
```

## DOCSTRINGS

- If we write strings inside `"""` or `'''` and if these strings are written as first statements in the module, function, class or a method, then these strings are called **documentation strings or doc-strings**.
- Useful to create an API (Application Programming Interface) documentation file.

## **VARIABLE AND IDENTIFIERS**

- A **variable** is a named location used to store data in the memory.
- Example: a=10; b=15
- Assignment Operator (=)
- The name given to a variable is called **identifier**.
- We need not to declare the datatype of the variable.

### **How Python see variables**

- A variable is seen as a **tag** (or name) that is tied to some value.
- Python considers the values as 'objects'.
- For example – number=10; number=1.1
- **In python, we don't actually assign values to the variables. Instead, Python gives the reference of the object (value) to the variable.**
- **Python is a type-inferred language.**

### **Example 1: Declaring and assigning value to a variable**

```
website = "python.org"  
print(website)
```

### **Example 2: Changing the value of a variable**

```
website = "python.org"  
print(website)  
#assigning a new value to website  
website = "outlook.office.com"  
print(website)
```