

# Python session-1

Wednesday, August 17, 2022 1:19 PM

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05	Functions in Python
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Python is Object oriented and high level programming language with integrated dynamic semantics  
Primarily for web and app development

**Guido van Rossum is the creator of the python**

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## Python Facts!

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Firefox has over **"230k lines of code"** written in Python



Microsoft promotes Python development with its IDE, **Visual Studio Code**



Netflix shares that they make extensive use of Python for **data science**



Uber says it uses **Jupyter Notebook** and **IPython** to share the **data**

Python is simple and readable like comparing to another language



```
class HelloWorld {  
    public static void main( String []args ) {  
        System.out.println( "Hello World!" );  
    }  
}
```

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



The arithmetic program of python

```
arithmetic.py > ...  
1  a = 1  
2  b = 2  
3  c = a + b  
4  d = a - b  
5  e = a * b  
6  f = a / d  
7  
8  print (c)  
9  print (d)  
10 print (e)  
11 print (f)  
  
PROBLEMS  OUTPUT  DEBUG CONSOLE  
  
Windows PowerShell  
Copyright (C) Microsoft Corporation  
  
Try the new cross-platform PowerShell  
  
PS D:\akshay.kanemoni\OneDrive\akshay.kanemoni\OneDrive - Infosys>  
3  
-1  
2  
-1.0  
PS D:\akshay.kanemoni\OneDrive\akshay.kanemoni\OneDrive - Infosys>
```

Python operation in the terminal

```
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\akshay.kanemoni>python  
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32  
Type "help", "copyright", "credits" or "license" for more information.  
>>> print("hello")  
hello  
>>> quit()  
  
C:\Users\akshay.kanemoni>
```

A variable is a memory location where we can store values. In Python, the data type will be identified according to the data we provide

A variable should start with a letter or an underscore and cannot start with numbers. **There are two ways of assigning values to a variable:**

1

Assigning a Single Value

2

Multiple Assignment

Python follows duck type variable like the compiler  
It will automatically gives the variable for it like int , float , string

```

C:\Users\akshay.kanemoni>python
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29)
tel)] on win32
Type "help", "copyright", "credits" or "license" for more
>>> a = "akshay"
>>> b = 1
>>> c = 2.0
>>> d = b + c
>>> e = a + b
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
TypeError: can only concatenate str (not "int") to str
>>> type(a)
<class 'str'>
>>> type(b)
<class 'int'>
>>> type(c)
<class 'float'>
>>> print(d)
3.0
>>> print(e)
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
NameError: name 'e' is not defined
>>>

```

#### Assigning variables at a time

```

C:\Users\akshay.kanemoni>python
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 64-bit
Type "help", "copyright", "credits" or "license" for more informat
>>> a = b = c = 10
>>> print(b)
10
>>> print(a)
10
>>>

```

We can also assign the values by using the comma operator

```

>>> x,y,z = 30,40,50
>>> print(x)
30
>>> print(y)
40
>>> print(z)
50
>>>

```