

Python Introduction: ¶

- Python is high level programming language.
- It is developed by 'Guido Van Rossum' in the year of 1991.
- It is mainly used to create server side web applications.
- Python has a simple syntax similar to the english language.
- Python supports the object oriented programming.
- Python works on different platforms(windows,mac,linux,....etc)

In [2]: 1 `print('Hello world')`

Hello world

In [3]: 1 `print("python programming")`

python programming

Python Comments:

- Python comments can be used to explain python code.
- comments can be used to make the code more readable.
- compiler will not execute the comment section lines.
- Two types comments:
 1. single line comments-> using '#' symbol
 2. multi-line comments-> using tripple quotes ->""" ""

```
In [8]: 1 # To print the hello world
        2 # This is a comment
        3 print('hello world')
        4 '''welcome to apssdc
        5 summer online internship
        6 for diploma students'''
```

hello world

Out[8]: 'welcome to apssdc\nsummer online internship\nfor diploma students'

```
In [13]: 1 # TO join two strings using '+' operator?
        2 print('welcome'+ 'python')
```

welcomepython

```
In [12]: 1 # To join string and integer using ,
        2 print('python',123)`
```

python 123

Python Variables:

- Variable name is used to store the single data.
- Rules of a variable declaration:
 1. variable name should starts with alphabets,alphabets followed by digits. ex: abc = 100 , abc12334='python'
 2. variable name should not allow the space in the middle of two words. ex: first name = 'abc'
 3. To join two words using underscore. ex: first_name = 'abc'
 4. Variable name should not starts with digits,special characters,keywords,inbuilt functions.. ex: 12 = 100, @abc = 12 , while = 45 , sum = 'python'
- Variable names are case-sensitive.

```
In [14]: 1 # examples on python variables...
          2 a = 10
          3 print(a)
```

10

```
In [15]: 1 b = 'python'
          2 print('b')
```

b

```
In [16]: 1 abc123 = 'apssdc'
          2 print(abc123)
```

apssdc

```
In [17]: 1 12 = 100
```

File "<ipython-input-17-361d96271702>", line 1

12 = 100

^

SyntaxError: cannot assign to literal

```
In [18]: 1 sum = 10
          2 print(sum)
```

10

```
In [19]: 1 while = 10
          2 print(while)
```

File "<ipython-input-19-17ee9e643c69>", line 1

while = 10

^

SyntaxError: invalid syntax

```
In [20]: 1 %a = 10
```

UsageError: Line magic function `%a` not found.

```
In [23]: 1 # case sensitive....
          2 n1 = 100
          3 print(n1)
```

100

```
In [25]: 1 # To assign the single value to the different variable names..
          2 a=b=c=10
          3 print(a)
          4 print(b)
          5 print(c)
```

10

10

10

```
In [26]: 1 # To assign the different values to different variable names?
          2 a,b,c,d = 10,20,30,40
          3 print(a,b,c,d)
```

10 20 30 40

Python Data Types:

- Data Type:
 - Data type is used to define the type of value to be used in a program.
- To know the data type we can use the type method():
- syntax: print(type(variable_name))

```
In [28]: 1 # TO store the integer data.
          2 n = 123
          3 print(n)
          4 print(type(n))
```

```
123
<class 'int'>
```

```
In [29]: 1 # TO store the string data.
          2 s = 'python'
          3 print(s)
          4 print(type(s))
```

```
python
<class 'str'>
```

```
In [30]: 1 # To store the floating data.
          2 f = 23.45
          3 print(f)
          4 print(type(f))
```

```
23.45
<class 'float'>
```

Type casting:

- To convert the data into one data type to another data type.
- 1. TO convert the integer to float: float(integer_data)

- 2. To convert the float to integer: `int(float_data)`
- 3. To convert the string to integer: `int(string_data)`

```
In [32]: 1 # TO convert the integer data into float?
          2 n = 12 # integer data
          3 print(type(n))
          4 n = float(n) # Floating conversion
          5 print(n)
          6 print(type(n))
```

```
<class 'int'>
12.0
<class 'float'>
```

```
In [33]: 1 # To convert the floating into integer?
          2 f = 34.56
          3 print(type(f))
          4 f = int(f) # integer conversion
          5 print(f)
          6 print(type(f))
```

```
<class 'float'>
34
<class 'int'>
```

```
In [36]: 1 # To convert the string data into integer?
          2 s1 = '123'
          3 print(type(s1))
          4 s1 = int(s1)
          5 print(type(s1))
```

```
<class 'str'>
<class 'int'>
```

input method:

- By using input method we can read the data from a user.

- syntax: variable_name = data_type(input(prompt message))

```
In [38]: 1 # To read the integer data from a user?
          2 m = int(input("enter m value: "))
          3 print(m)
          4 print(type(m))
```

```
enter m value: 12
12
<class 'int'>
```

```
In [40]: 1 # TO floating data..
          2 f1 = float(input("enter floating data: "))
          3 print(f1)
```

```
enter floating data: 12
12.0
```

```
In [ ]: 1 LMS Exam Login Instructions
          2
          3 Dear Student,
          4 While appearing for your LMS exam, please follow these login instructions carefully:
          5
          6 🧑 Username: Your Email ID registered on the Naipunyam Portal
          7 🗝 Password: The Mobile number (used during registration on the Naipunyam Portal)
          8
          9 ? If you do not know your registered email ID or mobile number,
         10 ✅ Please log in to your Naipunyam portal, click on your Profile and check your details overthere.
         11
         12 📌 Make sure your email and mobile number are active and updated.
         13
         14 All the Best!
```

