

Day 2 – VARIABLES & DATA TYPES

Variables

A variable is initially declared to have a specific data type, and any value assigned to it during its lifetime must always have that type, a variable may be assigned a value of one type and then later re-assigned a value of a different type

```
In [1]: number_of_wheels = 2  
print(number_of_wheels)
```

2

Variables can store data of different types which has the capability to do different things.

Text Type: str

Numeric Types: int, float, complex

Sequence Types: list, tuple, range

Mapping Type: dict

Set Types: set, frozenset

Boolean Type: bool

Integers:

Example

```
print(123123123123123123123123123123123123123123 + 1)
```

123123123123123123123123123123123123123124

Floating-point numbers:

Example pie = 3.14

Complex numbers:

Complex numbers are specified as

< real part > + < imaginary part >

For Example - 5+10j

Boolean:

Objects of Boolean type may have one of two values True or False

Strings:

Strings are sequences of character data. The string type in Python is called str. Example:

```
In [2]: print('Atlas')
```

Atlas

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.

```
In [4]: number = 5                # An integer assignment
pie     = 3.14                  # A floating point
Player_name = "Dhoni"          # A string

print(number)
print(pie)
print(Player_name)
```

5
3.14
Dhoni

Multiple Assignment

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

For example – Assigning to a same value -> a = b = c = 1

You can also assign multiple objects to multiple variables.

For example – a,b,c = 18,24,"Kohli"

Exercise:

1) Create three variables (a,b,c) to same value of any integer & do the following

a) Divide a by 10

b) Multiply b by 50

c) Add c value by 60

In [6]: `a = b = c = 1000`

```
print(a/10)
print(b*50)
print(c+60)
```

```
100.0
50000
1060
```

2) Create a String variable of 5 characters and replace the 3rd character with G

In [7]: `str = "Mouse"`
`str = str.replace("u", "G")`
`print(str)`

```
MoGse
```

3) Create two values (a,b) of int,float data type & convert the vise versa, Hint : convert a from int to float datatype & b from float to int datatype

In [10]: `a, b = 10, 3.5`
`a = float(a)`
`b = int(b)`
`print(a)`
`print(b)`

```
10.0
3
```

Completed Day 1's notes & exercises

THANK YOU!

Check out My Repository at https://github.com/AakankshaJarode/BestEnlist_Python_Internship.git
(https://github.com/AakankshaJarode/BestEnlist_Python_Internship.git)

Chech out My LinkedIn Page at <https://www.linkedin.com/in/aakanksha-jarode-1b0195179>
(<https://www.linkedin.com/in/aakanksha-jarode-1b0195179>)