



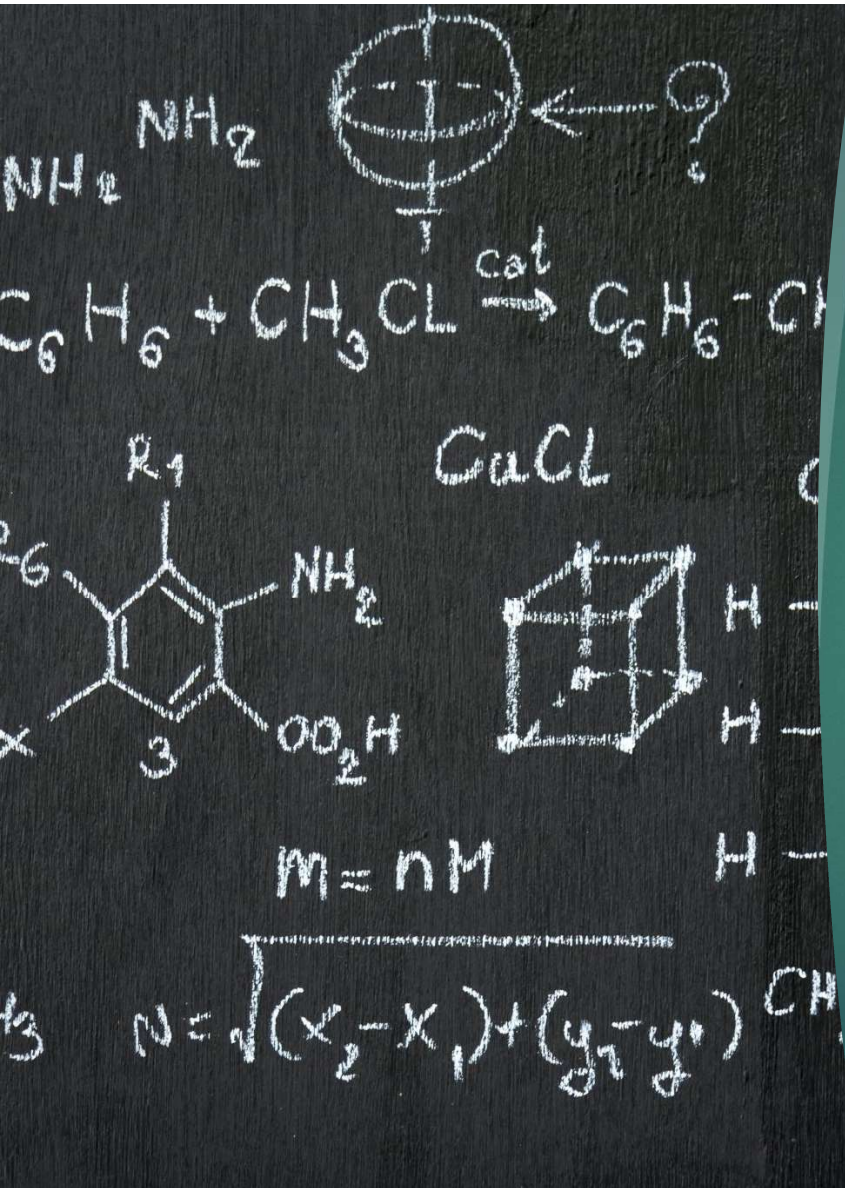
Introduction to Data Analyst and Data Science for Beginners

Lecture # 2 Variables and Data types in Python

Ehtisham Sadiq

Today's Agenda

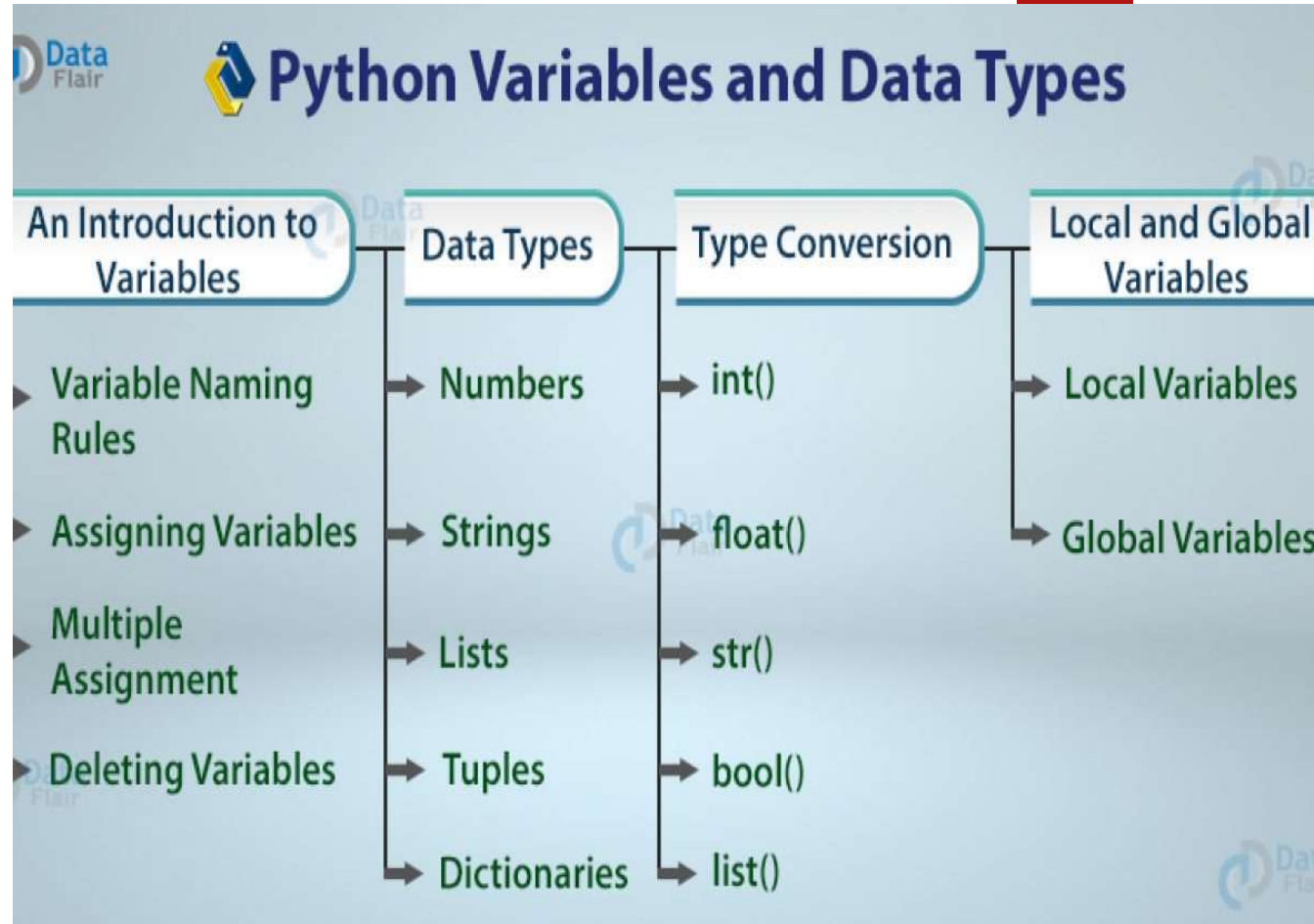
- ▶ **Recap of Previous Lecture**
- ▶ **print() Function / Built-in function**
- ▶ **Variables in Python**
 - Variables Names
 - What is variable
 - Declaring Variables and Assigning Values
 - Object References
 - Object Identity
 - Multiple Assignments
 - Python Variables Types
 - Delete a variable
 - Maximum possible value of integer in python
 - Print single and multiple variables in python
- ▶ **Python Data Types**
 - Immutable
 - Mutable
- ▶ **Input(), int(), float() functions**



print() Function

- ▶ Python **print()** function prints the given object on the screen or other standard output devices.
- ▶ **Syntax :**
 - `print(object(s) , sep= separator, end=end)`
 - **object(s):** It is an object to be printed. The Symbol * indicates that there may be more than one object.
 - **sep='separator' (optional):** The objects are separated by sep. The default value of sep is " ".
 - **end = 'end' (optional):** it determines which object should be print at last.

Variables In Python



Mutable Vs Immutable Objects

In general, data types in Python can be distinguished based on whether objects of the type are mutable or immutable. The content of objects of immutable types cannot be changed after they are created.


Mutable Objects

- byte array
- list
- set
- dict

Immutable Objects

- int, float, long, complex
- str
- tuple
- frozen set

Mutable and Immutable Objects in Python



int()	string, floating point to Integer
float()	string, integer to floating point number
str()	integer, float, list, tuple, dictionary to string
list()	string, tuple, dictionary to list
tuple()	string, list to tuple

Int(), float(), str()



Any
Question

