

**DS OCT 2022 Batch**  
**Module 2 : Python - Basics**

# Topics

- Variables
- Data types and type conversion
- Operators
- Flow Control : If, Elif, Else
- Loops

# Variables



# Variables

A Variable is an identity which is used to refer to a memory location. It is used to hold a value.

## **Naming Conventions of Variables :**

- 1) Variable Name must start with an alphabet or underscore ( \_ ).
- 2) Rest all the characters may be an alphabet of lower-case(a-z), upper-case (A-Z), underscore, or digit (0-9).
- 3) It must not contain any white-space, or special character (!, @, #, %, ^, &, \*).
- 4) It must not be similar to any keyword defined in the language(Example: print,set,list,if,else...).
- 5) Variable names are case sensitive; for example PYTHON,Python and python is not the same.
- 6) Examples of valid variable names : v1, \_a, p\_2, etc.

## **Print Function:**

print function in python is used to show the values stored in an object at runtime.

# **Data types and type Conversion**



# Data Types and type Conversion

A variable can hold different types of values.

For ex : Age of a person should be stored as a numeric value whereas Name of the person should be stored as a string.

Data type is classification of the data items.

It tells us what type of values are stored in a variable.

## Standard data types in Python :

- **Numeric** : Integer, Complex Number, Float
- **Dictionary**
- **Boolean** (True, False)
- **Set**
- **Sequence Type** : Strings, List, Tuple

