

## **Python lecture 1 (21-08-2018)**

- ✚ Developed in 1990
- ✚ Have two versions 2.x and 3.x
- ✚ Latest version of python is 3.7.0
- ✚ It work on ZEN principles
- ✚ Python is interpreted programming language
- ✚ It executes line by line
- ✚ Python is based upon the principle which is also known as ZEN of python.
- ✚ Its extension is .py

### **Execution modes:**

1. CHEVRON modes/ SHELL modes
2. File mode

Chevron mode in IDLE is denoted as >>>

### **IDE for python:**

1. IDLE //used by beginners
2. PYCHARM //it is mostly used in the industries

### **IMPORTANT NOTES:**

- ✚ Python does not contain semi-colon at the end of statement.
- ✚ Python is case sensitive.
- ✚ Python makes use of space to determine the scope.
- ✚ Python is loosely-typed programming language.
- ✚ Python supports complex data type making it more powerful language than other PL.

### **isinstance()**

this isinstance() method is used to check whether the variable belongs to particular data type.

### **input()**

this function always returns String. //str data type

### **List data type**

- ✚ List is a data type which can store data that can be both homogenous or heterogeneous.
- ✚ List is **mutable**.

- + List is indexed in nature.
- + **del()** can be used to delete the list from the memory.
- + **append()** is used to add item/value in the existing list.
- + **List** allows duplicates

### **Tuple data type:**

- + Tuple is immutable data type.
- + Tuple is more preferred to heterogeneous.
- + List is more preferred to homogeneous.

### **Dictionary data type:**

- + It stores data in the form of (key,value) pairs.
- + It is created by curly braces.
- + Anything can be key in dictionary provided it is immutable.
- + Duplicates are not allowed in dictionary.