**Python Programming**:

* Open source language.
* OOP and Procedural language
* Scripting language
* Code is executed line by line
* We need not to define data type, it is automatically allocated.

**Advantages Of python:**

* Easy to learn and implement.
* OOP/Procedural
* Dynamically typed
* Large pool of inbuilt – libraries:Web develop, Data science,AI
* Platform independent
* Can be extended to c/c++

**IDEs for python:**

* Generally use pycharm.

**Data types:**

Data types in python,

1. Numeric: int,float
2. Sequence type: string,list,tuple
3. Dictionary
4. Boolean
5. Set

**Variable:**

They are reserved memory allocation

Syntax: variable name = value

**Rules for declaring variable:**

1. It should start with Letter or “\_”
2. It is case sensitive
3. We can use reserved keyword like , if,for,..etc
4. Not other special char except ‘\_’.

Type(variable name)// shows the type of var

Explicit conversion

Variable name = new data type(variable name)

**Operators:**

Assignment operator

Arithmetic operator: \*,/,+,-

Relational operator: “==”, “>”,”<”,etc

Logical operator:”and”,”or”,”not”

Control Structures:

If,if-else,nested if

While,for etc.

Looping :

For i in range

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List:

A list of container that hold many objects under a single name.Not necessary the same data types