

# Data types

numeric:

What is int?

Python int() function **converts the specified value into an integer number**

What is float?

Float() is a method that returns a floating-point number for a provided number or string.

What is complex?

Python complex() function is a built-in function in python.

example (5+2j) when real and imaginary parts are passed, or it also converts a string to a complex number.

Sequences types:

String?

It is used to store data and characters and etc.

It is enclosed with parentheses().

Single or double quotes are used to write a single line function.

Triple quotes are used to write multiple lines.

It can change the values.

List?

Lists are used to store multiple items in a single variable.

It is enclosed with [ ].

It has array indices. Starting from 0 .

What we have did in str , we can use in list

Tuple?

It is enclosed by parentheses ().

But in tuple it cannot change the values.

It doesn't need single or double quotes.

tuples are used to store multiple items in a single variable .

## Range?

**U know how to range the values.**

**The range() function returns a sequence of numbers, starting from 0 by default, and increments by 1 (by default), and stops before a specified number.**

## Mapping type:

### Dict?

**Dictionary in Python is an unordered collection of data values, used to store data values like a map, which, unlike other data types that hold only a single value as an element, Dictionary holds key:value pair. It is enclosed with curly brackets{ }.**

### Set?

**A set is a collection which is unordered, unchangeable\*, and unindexed. Sets are used to store multiple items in a single variable It is enclosed with curly brackets{ }.**

# Control statement

What is the IF function in Python?

**The if-else statement is used to execute both the true part and the false part of a given condition.**

What is Elif called in Python?

## Else If

Elif Statement—Python's Version of **Else If**

In Python, the else if statement is called elif. This is different compared to other programming languages. Usually, you see else if or elseif. The elif means “if the previous condition(s) was not true, try this”.

What is else in Python?

**The else keyword is used in conditional statements (if statements), and decides what to do if the condition is False.**

## What is a for loop in Python explained with an example?

Python for loops are **used to loop through an iterable object (like a list, tuple, set, etc.) and perform the same action for each entry**. For example, a for loop would allow us to iterate through a list, performing the same action on each item in the list.

## What is the while loop in Python?

The while loop in Python is **used to iterate over a block of code as long as the test expression (condition) is true**. We generally use this loop when we don't know the number of times to iterate beforehand.

## What is a Nested Loop in Python?

A nested loop is **a loop inside the body of the outer loop**. The inner or outer loop can be any type, such as a while loop or for loop. For example, the outer for loop can contain a while loop and vice versa

Ide - integrated development environment

How do python code execute?

Source code -> compiler -> bytecode -> virtual machine -> running module  
interpreted  
|  
Libraries modules