

The Python logo is a large, rounded rectangle with a horizontal gradient from purple on the left to blue on the right. Inside this rectangle, the word "PYTHON" is written in a bold, white, sans-serif font. The text is centered horizontally and is contained within a solid red rectangular area.

PYTHON

The text "Data Types" is written in a large, white, sans-serif font. It is framed by two red L-shaped brackets: one on the left and one on the right, both pointing towards the text.

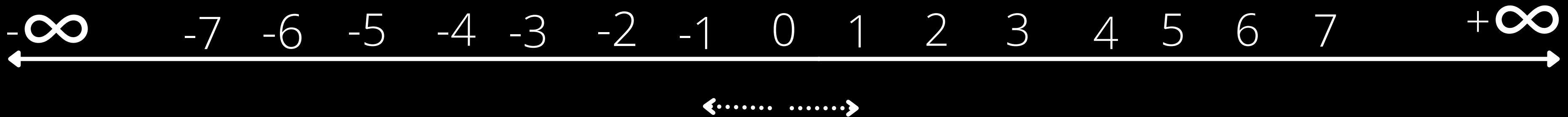
Data Types

Python Setup Information

▶ **Version** : 3.8.6

▶ **IDE** : PyCharm (Community Edition Open Source)

Number System



INTEGER

▶ **Key Word** : int

▶ **DESCRIPTION** : Integers are whole numbers
tends $-\infty$ to $+\infty$

FLOAT

▶ **Key Word** : float

▶ **DESCRIPTION** : Float are specified with a decimal point
numbers tends $-\infty$ to $+\infty$

STRINGS

▶ **Key Word** : str

▶ **DESCRIPTION** : Strings are sequences of character data.

LISTS



Key Word : list

DESCRIPTION :

List are one out of 4 built-in data types in Python



Which is used to store multiple items in a single variable.

Where all items are indexed, ordered, changeable, and allow duplicate values.

DICTIONARY

▶ **Key Word** : dist

DESCRIPTION :

▶ Dictionaries are used to store data values in key : value pairs.

TUPLES

▶ **Key Word** : tup

▶ **DESCRIPTION** :

Tuples are used to store multiple items in a single variable.
Where items are ordered and unchangeable.

SETS

▶ **Key Word** : set

▶ **DESCRIPTION :**

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

Where items is unordered, unchangeable* (Can be removed), and unindexed.

BOOLEAN

▶ **Key Word** : bool

▶ **DESCRIPTION** :

Booleans represents one of the two values i.e. True or False.

Data Types Use

Uses	Name	Data Types
Text Operation	String	<code>str</code>
Numeric Operation	Integer, Float , complex(real, imaginary)	<code>int</code> , <code>float</code> , <code>complex</code>
Sequence Operation	Lists,Tuples,range(start, stop, step)	<code>list</code> , <code>tuple</code> , <code>range</code>
Mapping Operation	Dictionary	<code>dict</code>
Set Operation	Sets,frozenset(iterable)	<code>set</code> , <code>frozenset</code>
Boolean Operation	Booleans	<code>bool</code>
Binary Operation	<code>bytes(x, encoding, error)</code> , <code>bytearray(x, encoding, error)</code> , <code>memoryview(obj)</code>	<code>bytes</code> , <code>bytearray</code> , <code>memoryview</code>

THANK

YOU