

Data types

A data type defines type of data, a variable can store such as numbers, text or logical values.

It tells python, what type of data you are working with.

Single valued data type \rightarrow hold a single value.

int \rightarrow $a = 3$

float \rightarrow $b = 3.1$

complex \rightarrow $c = 1+2j$

bool \rightarrow $a = \text{True}$.

Multi valued data type

str \rightarrow $x = \text{"Hello"}$

list \rightarrow $y = [1, 2, 3]$

tuple \rightarrow $z = (\text{"abc"}, \text{"def"})$

set \rightarrow $x = \{\text{"a"}, \text{"b"}, \text{"c"}\}$

dictionary \rightarrow

Setting the specific data type

- $x = \text{str}(\text{"hello"})$
- $x = \text{int}(3)$
- $x = \text{list}((\text{"a"}, \text{"b"}, \text{"c"}))$
- $y = \text{float}(1.2)$
- $x = \text{complex}(2j)$
- $d = \text{tuple}((\text{"a"}, \text{"b"}, \text{"c"}))$

`x = bool(5)`

→ to get the type of datatype

`type(x)`

→ inbuilt data type → defaultly presents in python.

Variable declaration methods

`a=1`

`b=2`

`c=3`

`print(a,b,c)`

`a=1; b=2; c=3`

`print(a,b,c)`

`a,b,c = 1,2,3`

`print(a,b,c)`

→ Float is better than int

bec it can read both int & float data.