

Python $\begin{cases} \text{Web Dev} \\ \text{DS} \end{cases}$

Environment $\begin{cases} \text{local : Anaconda} \\ \text{cloud : Google Colab} \end{cases}$

Anaconda \rightarrow Jupyter Notebook $\begin{cases} \text{Markdown (Documentation)} \\ \text{code (coding)} \end{cases}$

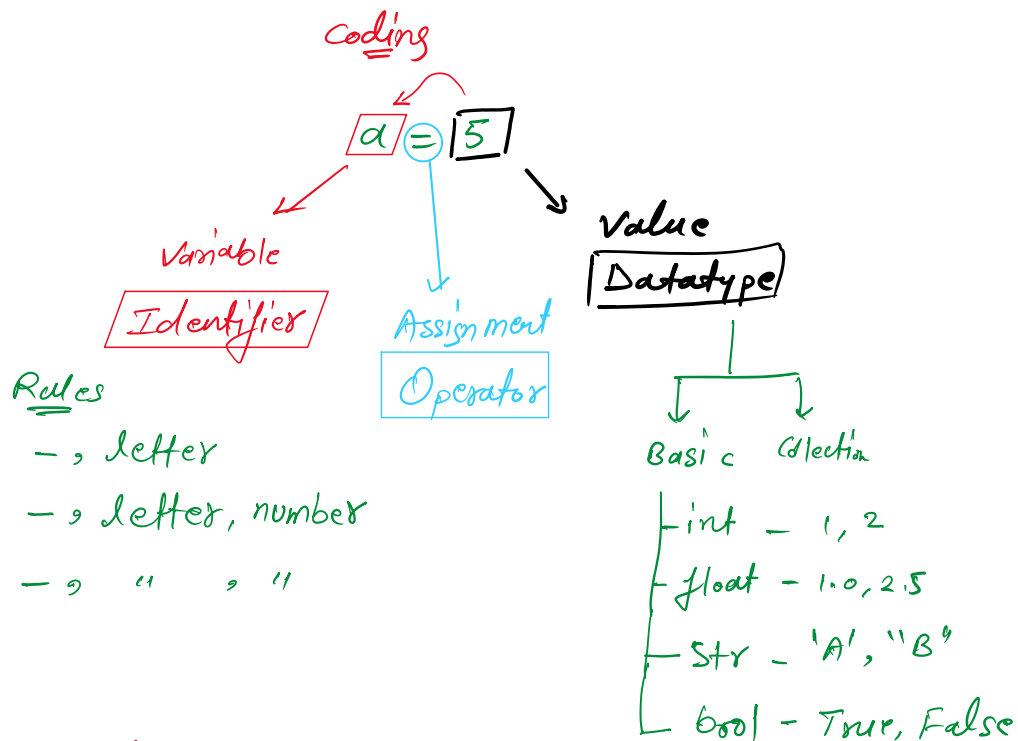
Markdown

: Heading

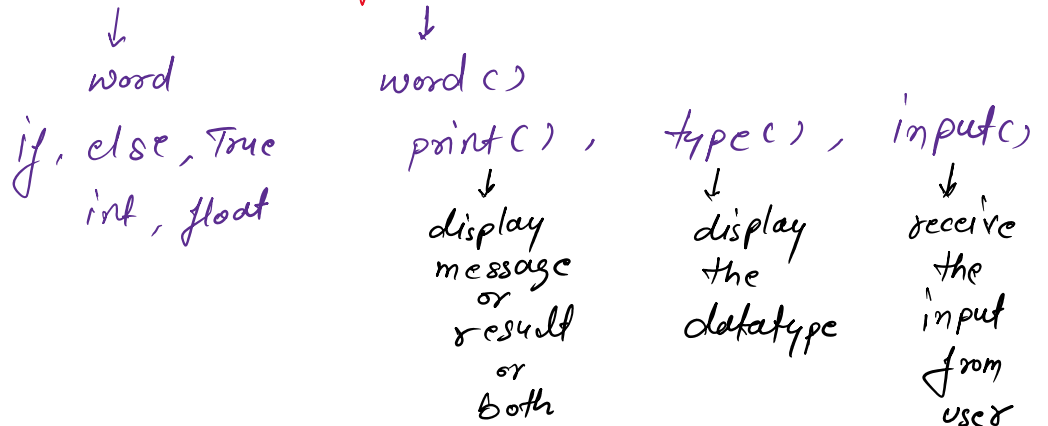
* : Italic

** : Bold

!



Python has keywords & functions



Operators

(a) Arithmetic +, -, *, /

(b) Assignment =, +=, -=

- (1) Arithmetic +, -, *, /, %
- (2) Assignment =, +=, -=
- (3) Comparison >, ==, <
- (4) Logical and, or, not
- (5) Membership in, not in
- (6) Identity is, is not

Rule:

num with num : all except membership

num with text : *

text with text : +, membership

Strings

- ① Create 
 - ' '
 - " "
 - """ """
- ② Access
- ③ Operation

'Uwaish'

'Uwaish belongs to DS'

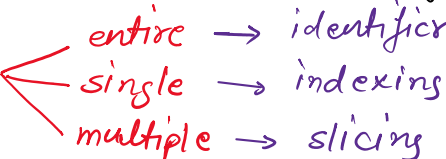
"Uwaish's laptop is Asus"

"Uwaish's 'watch' is user friendly"

string1 = "Uwaish Musair" → static ✓

string2 = input("Please enter a string:") → dynamic

⇒ String is a sequence of characters.

- ② Accessing 
 - entire → identifier
 - single → indexing
 - multiple → slicing

name = "Uwaish"
0 1 2 3 4 5

name = "Uwaish"
0 1 2 3 4 5
-6 -5 -4 -3 -2 -1

name
↳ "Uwaish"

a) Indexing

name[0] → 'U'

name[2] → 'a'

name[-2] → 's'

name[3] → 'i'

b) Slicing

name[start : end]
start end
 (n-1)

e.g. name[0 : 2]
↳ 'Uw'

name[0 : 4] → 'Uwai'

name[:] → 'Uwaish'

name[: 2] → 'Uw'

name[start : end : step]
start end step
 (n-1) (n-1)

name[0 : 6 : 2] → 'Uds'