Python Revision and String

07 July 2025 15:49

Python → Web Dev
Python → DS

Environment → local : Anaconda
Environment → cloud : Google Colab

Anaconda → Jupyter Notebook → Markdown (Documentation)
Jupyter Notebook → code (coding)

Markdown

: Heading
* : Italic
** : Bold
!

Coding

a = 5

a → Variable → Identifier
= → Assignment Operator
5 → Value → Datatype

Datatype → Basic, Collection

Basic
- int - 1, 2
- float - 1.0, 2.5
- str - 'A', "B"
- bool - True, False

Rules
- , letter
- , letter, number
- , " , "

Python has keywords & functions

keywords → word
if, else, True
int, float

functions → word()
print() → display message or result or both
type() → display the datatype
input() → receive the input from user

Operators

(a) Arithmetic + , - , * , / - - -
(b) Assignment = , += -=

(a) Arithmetic + , − , * , / — — —

(b) Assignment = , += , −= — — —

(c) Comparison > , == , < — — —

(d) Logical and , or , not

(e) Membership in , not in

(f) 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 Husain" → 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 (n-1)

e.g. name[0:2]
↳ 'Uw'

name[0:4] ⇝ 'Uwai' name[:] ⇝ 'Uwaish'

name[:2] ⇝ 'Uw'

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

name[0:6:2] ⇝ 'Uas'