



27/07/21

Datatypes

- ↓
- Numeric datatypes {
1. int - Integer - num. without decimal
 2. float - Floating - num. with decimal
- String datatype → 3. str - String - collection of characters
- Data Structure {
4. list - Collection of elements.
 5. tuple - " "
 6. dict - Dictionary - "
- Boolean → 7. bool - True / False

→ int - 4, 7642, 887940
-4, -7642, -48

→ float - 7.6, 92.54, 678.27
-7.6, -52.9, -78.2

Numeric datatypes

assignment
abc = 2020
Variable int value

③.

Str \rightarrow Collection of characters

- 1. Alphabets
- 2. Numbers
- 3. Special characters

Enclose with quotes

④ types.

- 1. ' ' } Single line str
- 2. " " }
- 3. ''' ''' } Multi line str
- 4. """ """ }

⑤ list \rightarrow collection of elements of diff. datatypes

$a = 25 \rightarrow []$ Square brackets

$a = 76 \rightarrow$ Mutable

$a = 76 \rightarrow$ Elements are separated by (,) comma

Immutable enclosed $\rightarrow [4, 6, 8, 10]$
 $[2.4, 6, 79]$

$['Apple', 'orange']$
 \downarrow return \downarrow return

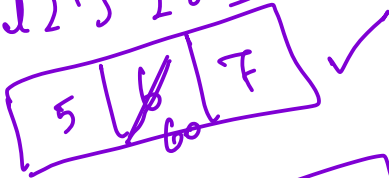
Mutable

List

Dict

$l = [5, 6, 7]$

$l[1] = [60]$



Immutable

int

float

str

tuple

bool

$t = (5, 60, 7)$
 $f = (5, 6, 7)$

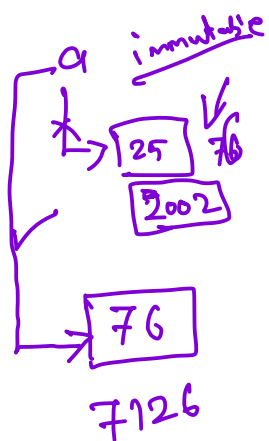


$t[1] = 60$ ✗
mutable



$a = 25$

$a = 76$



⑤ tuple → Collection of elem. of diff. data,

→ () - parenthesis

→ Immutable

→ , (comma)

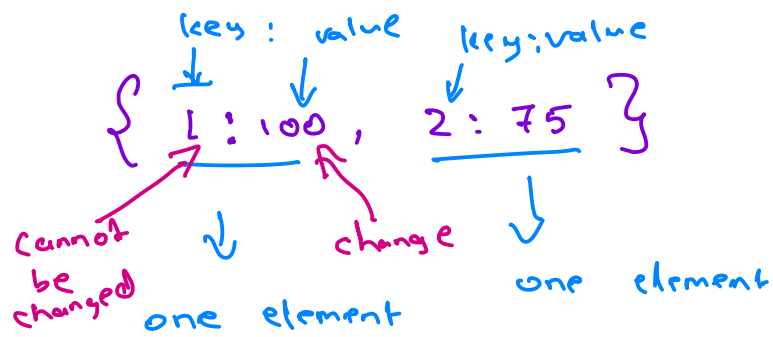
⑥ dict → Collection of elements of diff. datatype

→ { } → curly braces

→ mutable

→ Unordered sequence

→ key:value pairs (separated by ,)



keys
(Immutable)

int
float
str
tuple
bool

values ✓

int
float
str
list
tuple
dict
bool

list dict } X → Mutable

str
list
tuple
dict

collection of elements

functions / methods

pre defined (Built-in) user-defined

⑦ $\text{bool} \rightarrow \underline{\text{true}} / \underline{\text{false}}$