

for loops :

⇒ Health → Increasing knowledge → Work

Mercedes → autonomous car core team.

while condition (True):

execute.

⇒ Range :

()

⇒ excluded

[]

⇒ Inclusive

⇒ [start , end) ⇒ start inclusive
end exclusive

⇒ range (start , end , jump)
 ↓ inclusive ↓ exclusive

★ Range in Python:

⇒ range(start, end, jump)

(i += 2)

i) range(end) : start : 0
jump : 1

quiz 1: range(11) ^{↗ end}

⇒ 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, ~~11~~

ii) range(start, end) : jump : 1

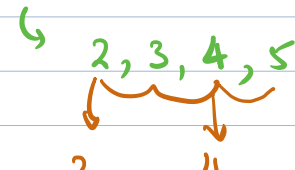
quiz : range(7, 8) : 7, ~~8~~
start end

~~range[7, 8)~~ ⇒ wrong syntax

quiz : range(8, 8) ⇒ ~~8~~
start end

iii) $\text{range}(\text{start}, \text{end}, \text{jump}) \Rightarrow \text{integers}$

$\Rightarrow \text{range}(2, 6, 2)$



quiz: $\text{range}(1, 11, -1)$

1, 2, 3, 4, 5, 6, 7, 8, 9, 10

$[] \Rightarrow \text{empty list.}$

$\Rightarrow 1, 2, 3, 4, 5, 6, 7$

$(1, N) \Rightarrow \text{range}(1, N+1)$

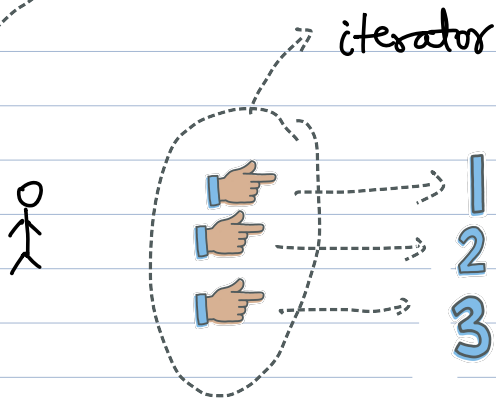
$[1, 10]$

$\Rightarrow \text{range}(1, 11)$

$\Rightarrow \text{range}(1, 10) \quad \times \quad \checkmark \checkmark$

$\Rightarrow \text{range}(1, 11, 1)$

Iterable, Iterator, Iteration?



↗ iterable




↖ iteration

`range(1, 4)` \Rightarrow 1, 2, 3

i

for loop Syntax:

for iterator in iterable :

 i (by general convention)

Body

⇒ Diff b/w for & while syntax:

i = 0

while i < 5 :
 print(i)
 i += 1

for i in range(5):
 print(i)

⇒ range(5, 1) ^{start} ^{end} increment by default = 1

⇒ start = 5 ✓

⇒ end = 1 ✓

⇒ increment = -1 ✗

✓

2) increment = 1 ✓