1) Need for `FOR` loops
2) list
3) range( )
4) jumps in range
5) Complete for loops and problems.

while | Condition_is_true :

| Do this thing again

Note: To exit out of loop
either | `break` | statement
should be executed
or | Condition should
be false.

FOR

2)

for element in (range(a,b)):

do this again

an again

3) Loop will execute fixed number of times depending on range function

List

↳

a = 1

a = "Hello"

4) Multiple Values in the Same Variable

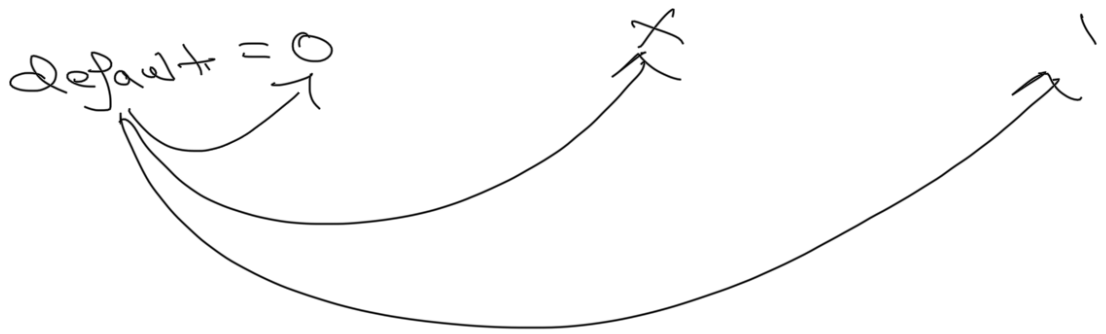5) Collection of data

a = [ ]

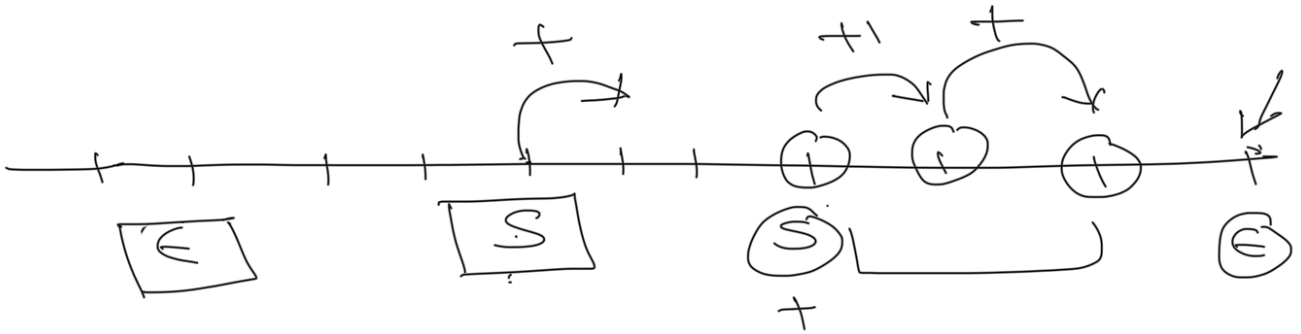a = ['Hello', 'Sachin', 'abc']

Range

range (start , end , jump)

default = 0

range (1 , 8 , 7)

[1 , 2 , 3 , 4 , 5 , 6 , 7, 8]

⟹ [1 , 8) ⟹ all numbers between
1   to   8 (Not include
Not included

+ve jump

f   +1   +

□ E   □ S   S   E   +

[ ]

X   E   S   -1

←—— -ve jump

(2,2) ⇒ [ ]
        +1

        +1

-1   0   1   2   3   4   5

v (2,3)
[ ]
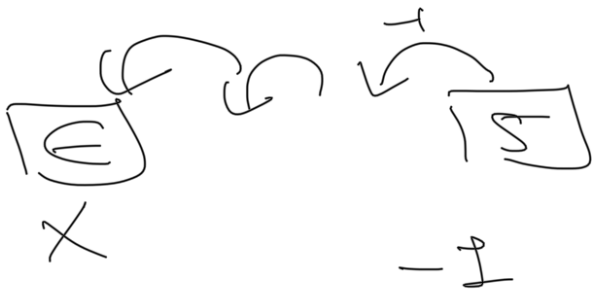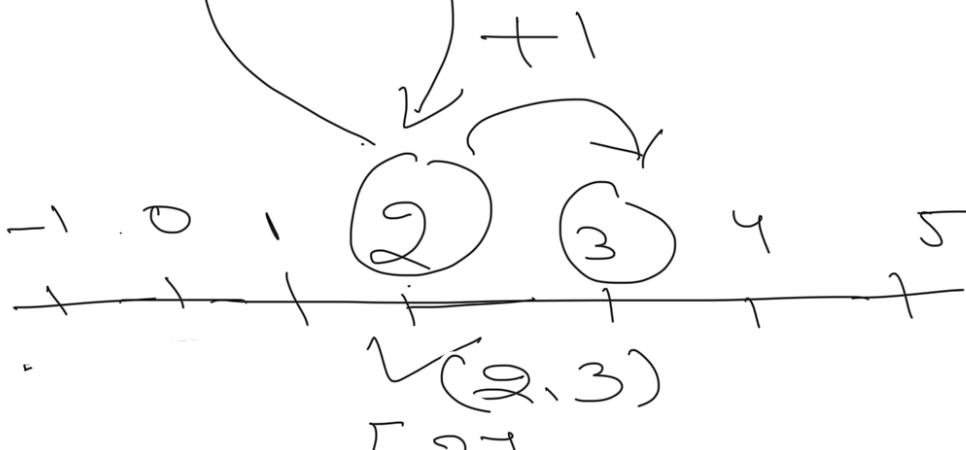
2, 2

S

---

c = 0

a = 5

b → 8

Expected Result

$$5 + 6 + 7 + 8$$

for i in range (a, b+1):

  c = c + i   # c+=i

print (c)

i=5	c=0 ✓
i=6	c=5 ✓
i=7	c=11 ✓
i=8	c=18 ✓
i=9	c=26 ✓
i=9	x

a = 3

c =	✏

1 x̶ 0 ≠
0 x̶ ≠

for i in range(1, a + 1)   #x3#

$$c = c \times i$$

i = 1	c = 1	1×1
i = 2	c = 1	1×2
i = 3	c = 2	2×3
i = 4	c = 6	

print(c)
↓
6