

Loops

→ Repeat (Iterative Process)

Starting value = 0
ending value = 10
step size = 1

for

while

index

values

for i in range(10):
print('hello world')

0 ————— hello world

1 —————

2 —————

3 —————

4 —————

5 —————

6 —————

7 —————

8 —————

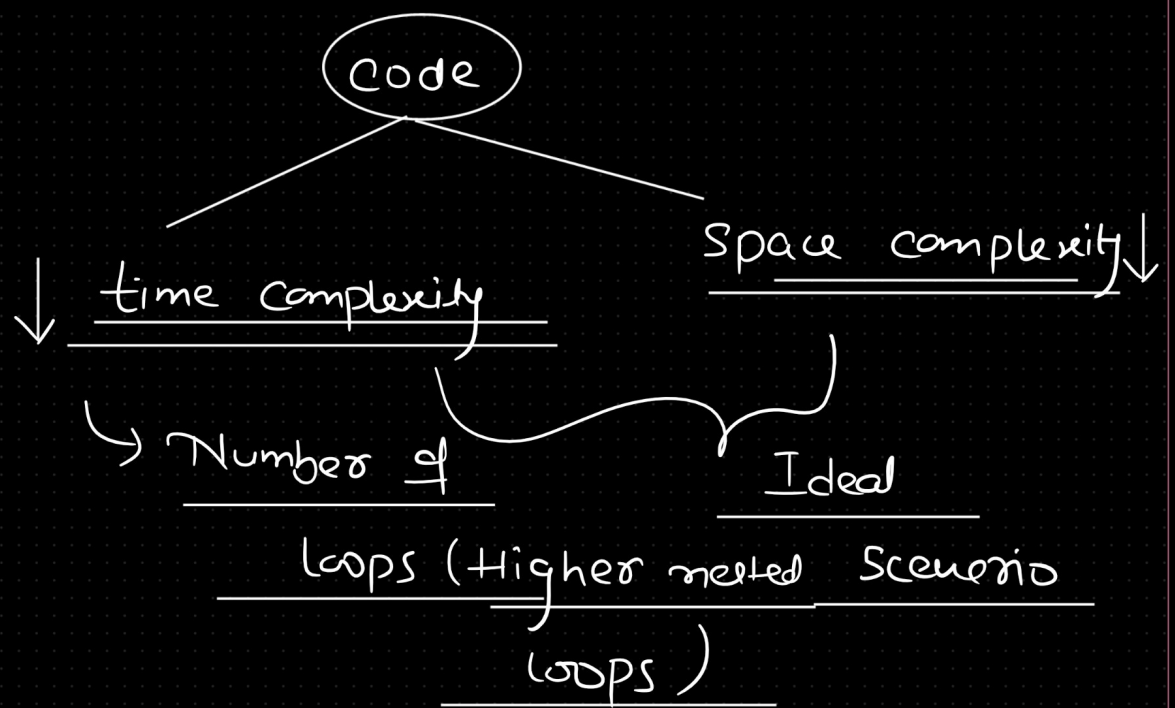
9 —————

10 ← stop

lst = [1, 2, 3, 4, 5]

for num in lst:

Print(num)



0	1	2	3	
2	4	7	10	$n = 4$

lst = [2, 4, 7, 10]

$n = 4$

nested loops

time complexity: $O(n^2)$

for i in range(n):

for j in range(n):

print(lst[j])

$j = 0, j = 1, j = 2, j = 3$
2 4 7 10

$i = 1$
0 1 2
2 4 7
3 10

$i = 2$
0 1 2
2 4 7
3 10

$i = 3$
0 1 2
2 4 7
3 10

$4 \times 4 = 16$

$O(n^2)$

num = 10

while num > 0:

print('hello world')

num = num - 1

condition

true

Conditional Statements

If [✓] elif [✓] else

Score > 85

→ Distinction

Score > 60

→ first class

Score > 40

→ average

fail

function

↳ block of executable code

that performs any

specific

task

Python → 'def'

user-defined

def

add

mul

Lambda function

↳ Shorter

lines of

code

Built-in

Already

predefined

map,

filter

↳ List Comprehension

Shorter lines of

code