

```
sum = 0    [0, ----- 9]
for i in range(10):
    sum = sum + 1
print(sum)
```

<u>i</u>	<u>sum</u>
0	0
1	0 + 1 → 1
2	2
3	3

What will the above code print?

9	10
---	----

- A. 0
- B. 9
- C. 10
- D. 45

Answer: C

The loop will have 10 iterations, and each iteration will increment sum by 1 for a total of 10

```
sum = 0    [0, ..., 9]
for i in range(10):
    sum = sum + i
print(sum)
```

What will the above code print?

- A. 0
- B. 9
- C. 10
- D. 45

<u>i</u>	<u>sum</u>
0	0
1	1
2	3
3	6
4	10
5	...
6	...
7	...
8	...
9	45

Answer: D

The loop will have 10 iterations, and each iteration will increment sum by i the loop variable, that is by the values in the sequence generated by range(10), e.g., sum = 0 + 1 + 2 + 3 ... + 9

```

sum = 0
for i in range(5):
    for j in range(5):
        sum = sum + i
print(sum)

```

What will the above code print?

- A. 10
- B. 50
- C. 225
- D. 500

<u>i</u>	<u>j</u>	<u>sum</u>
		0
0	0	0
0	1	
0	2	
0	3	
0	4	0
1	0	1
1	1	2

Answer: B

Each iteration of the outer loop performs 5 iterations of the inner loop. Thus the computation performed is:  $\text{sum} = 0 + 0 + 0 + 0 + 0 + 1 + 1 + 1 + 1 + 1 \dots 4 + 4 + 4 + 4 + 4$