

```
sum = 0
for i in range(10):
    sum = sum + 1
print(sum)
```

What will the above code print?

- 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

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```

What will the above code print?

- A. 0
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- C. 10
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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

Answer: B

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