

## Challenge 2: Big O of Nested Loop with Subtraction

Compute Big O of an algorithm which involves nested loops and the loop variables decrement with subtraction.

We'll cover the following ^

- Problem Statement
- Code Snippet

### Problem Statement #

Let's test our time complexity skills. Compute the Big O time complexity of the code snippet given below. It is better to solve it on a piece of paper and then see if your answer matches with the correct option!

### Code Snippet #

```
1 n = 10 # n can be anything, this is just an example
2 sum = 0
3 pie = 3.14
4 for var in range(n, 1, -3):
5     print(pie)
6     for j in range(n, 0, -1):
7         sum += 1
8
9 print(sum)
10
```



If you have computed the time complexity of the code snippet above, answer the following question and see if your result matches the correct answer!

Q Which of the following best describes the Big(O) of the program written above?

☐ A)  $O(n)$

☐ B)  $O(n \log_3 n)$

☐ C)  $O(\log_3 n)$

☐ D)  $O(n^2)$



COMPLETED 0%

1 of 1



Check out the next lesson for an explanation of the solution!

Back

Next

Solution Review: Big O of Nested Loo...

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