# Challenge 1: Big O of Nested Loop with Addition

Compute the Big O complexity of an algorithm which involves nested loops where the loop variables increase with addition.

> **We'll cover the following** ⌄
>
> - Problem Statement
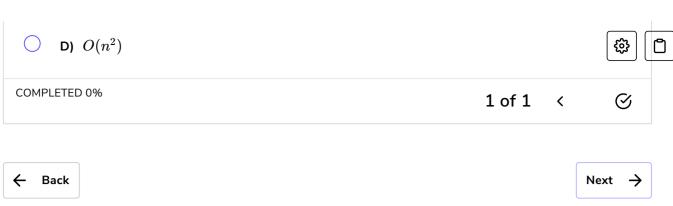>   - Code Snippet

## Problem Statement #

Compute the Big O 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
5   for var in range(1, n, 3):
6       print(pie)
7       for j in range(1, n, 2):
8           sum += 1
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)** $O(nlog_3n)$

○  **C)** $O(log_3n)$

← **Back**

Common Complexity Scenarios

**Next** →

Solution Review: Big O of Nested Loo...

☑ **Completed**

⊘ Report an Issue

⍰ Ask a Question (https://discuss.educative.io/tag/challenge-1-big-o-of-nested-loop-with-addition__introduction-to-complexity-measures__data-structures-for-coding-interviews-in-python)