



# Challenge 5: Nested Loop with Multiplication (Intermediate)

A more complex exercise based on the Big O of an algorithm which involves nested loops and the loop variables increment with multiplication.

## 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 # can be anything, this is just an example
2 sum = 0
3 pie = 3.14
4 for var in range(1, n, 3):
5     j = 1
6     print(pie)
7     while j < n:
8         sum += 1
9         j *= 3
10 print(sum) # O(1)
11
```





Answer the following question and see if your result matches the correct answer!



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

A)  $O(n)$

B)  $O(n \log_3 n)$

C)  $O(\log n)$

D)  $O(n^2)$

Submit Answer

Reset Quiz ↻

Now let's move forward to a more complex nested loop problem and see if you can solve it on your own.



Interviewing soon? We've partnered with Hired so that companies apply to you instead of you applying to them. [See how](#) ⓘ

[← Back](#)[Next →](#)

Solution Review: Nested Loop with M...

Solution Review: Nested Loop with M...

 Completed Report an Issue