

Part 1

What is the big O notation for `calc_factorial`?

$O(n)$

What is the big O notation for `calc_stats`?

$O(n)$

What is the big O notation for `print_triangle`?

$O(n^2)$

What is the big O notation for `display_letters_in_names`?

$O(n)$

What is the big O notation for `average = sum(numbers) / len(numbers)`?

$O(n)$

What is the order of $O(n^2)$, $O(\log n)$, and $O(n)$ (best performance first and worst performance last)?

$O(\log n)$, $O(n)$, $O(n^2)$

Part 2

Do the actual results agree with the big O predictions made earlier? If not, what do you think the big O should be?

1 is $O(n)$ and that checks out 2 is $O(n^2)$ and that checks out 3 is $O(\log n)$ and that checks out

Which function (`algorithm1`, `algorithm2`, `algorithm3`) has the best performance and which one the worst performance?

3 is the best and 2 is the worst, just looking at the time.

Looking at the results, why do we say that big O only applies when n is "large"?

You can barely count the difference in milliseconds on the first round, but as n got higher the difference was much easier to tell apart.