Topic/Title:

Big O Notation - What is Good Code?

Keywords/Questions:

Notes:

1) Readable - Can be easily read.
2) Scalable - Can be easily manipulated for more data.

Runtime - How long it takes to run code.

Runtime effects the efficiency of how the code runs.

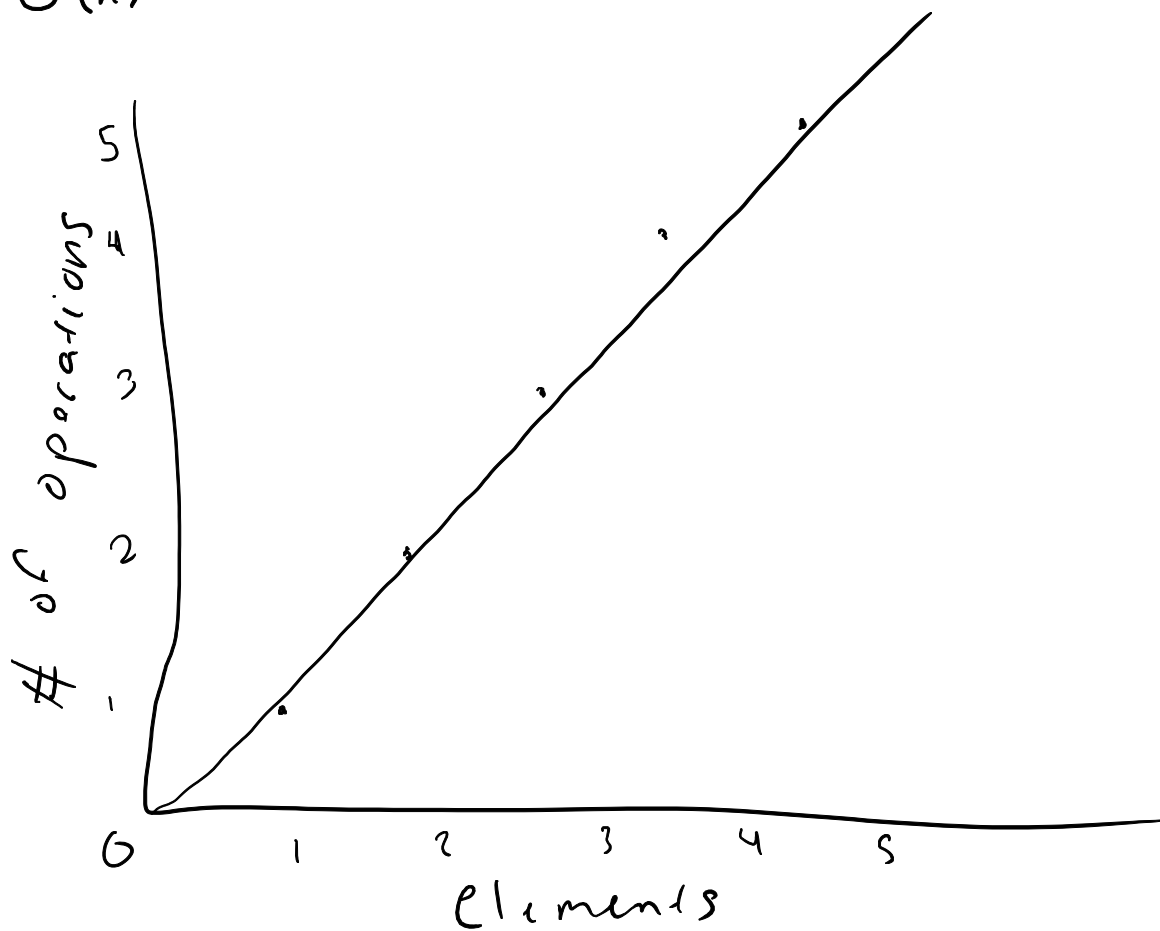How much does our algorithm slow down with scalability?

$O(n)$ - Linear Scaling
$O(1)$ - Constant, no loops

Scalability $- Speed$
$- Memory$

3 pillars of code - Readable, Memory, Speed

Summary:

$\theta(n)$

# of operations

5
4
3
2
1

0   1   2   3   4   5

elements

$\theta(1)$

# of operations

6
5
4
3
2
1

0   1   2   3   4   5   6

elements