Lab 1

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Course Section: **CSC 2720-012**

1. **Order the following nine functions by asymptotic growth rate**

Slowest to Fastest

1. Write a python function that has O(n3) time complexity and O(n) space complexity.

def cubeSum(n):

results = [0] \* n

for i in range(n):

for j in range(n):

for k in range(n):

results[i] += i + j + k

return results

result = cubeSum(2)

print(result)

1. Find out the time and space complexity for the following two functions:

A close-up of a computer code

Description automatically generated

Time Complexity: O(*n*2) -- Space Complexity: O(1)

A screenshot of a computer code

Description automatically generated

Time Complexity: O(*n*3) -- Space Complexity: O(*n*3)