

# CSC212 Tutorial #3

## Performance Analysis-2

**Question 1: Find the total number of primitive operations and the Big Oh notation of the following methods:**

	Statements	S/E	Freq.	Total
1	for (int i = 0; i < n-5; i++)			
2	for (int j = n; j >= 2; j--)			
3	S.O.P(i);			
	Total Operations			
	Big Oh			

	Statements	S/E	Freq.	Total
1	for (int i = 0; i < n; i++)			
2	for (int j = 0; j <= i; j++)			
3	S.O.P(i);			
	Total Operations			
	Big Oh			

**Question 2: Find the simplest  $g(n)$ ,  $c$  and  $n_0$  for the following  $f(n)$  s.t:  $f(n) \leq cg(n)$ ,  $\forall n \geq n_0$ .**

$$5n^3 \log n + 20n^2 - 4n + 3$$

**Question 3: Find the big Oh notation for the following functions:**

$$2^{4\log n + 2} + n^3 \log n$$