

King Saud University
College of Computer and Information Sciences
Computer Science Department

CSC 212

First Semester 1437-1438

Tutorial #3

Important: This tutorial has an online part, which you should complete on LMS (Tutorial section). The deadline for online task is Sunday October 9th at 8:00 A.M

1. Find the total number of primitive operations and the Big Oh notation of the following method:

	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			

2. Find the big Oh notation for the following functions:

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

3. Order the following functions by asymptotic growth rate.

$$4n \log n + 2n$$

$$2^{10}$$

$$4n$$

$$2^{\log n}$$

$$n^2 + 10n + n^3$$