## **Question 1:**

# Find the running time as a function T(*n*) of input size *n* in each of the following cases..

# Express the growth rate of the function in Big O notation.

**(a) s = 0;**

**for (i = n; i > = 1; i--)**

**s = s+1;**

## **Question 2:**

* Express the following functions in terms of Big-O notation (a, b and c are constants). Which one is the Best? Which one is the worst?

1. f(n) = an2 + bn + c
2. f(n) = 2n + n log n + c
3. f(n) = n log n+ b log n + c
4. f(n) = 3(n+1)7+2n log n