KING SAUD UNIVERSITY COLLEGE OF APPLIED STUDIES AND COMMUNITY SERVICE GC211(Data Structures) Tutorial #1

1. Write an algorithm to find the largest of a set of numbers. You do not know the number of numbers.

Find Largest

Input: A list of positive integers

Set Largest to 0

while (more integers)

if (the integer is greater than Largest)

then

Set largest to the value of the integer

End if

End while

Return Largest

End

2. Write an algorithm in pseudocode that finds the average of (n) numbers.

Algorithm: find Average Input: integer Array list [] of N positive integers Output: Average of numbers. Process: double sum ←0 double average ← 0 count ←0 while (count < size of list) sum ← sum + list [Count] count ← count + 1 End while average ← sum / n return average