

**Part 1: Design the following algorithm and calculate running time ( $T(n)$ ) for each**

1. Write a Pseudo Code that reads three numbers and prints the value of the largest number.
2. Write a Pseudo Code to generate(print) N items of the Fibonacci series
3. Write a Pseudo Code to find average of n numbers

**Part 2: Calculate the Order (Time Complexity) for the following:**

1)

```
Sum:=0
For I:=1 to 1000
    Sum+=I
End for
```

2)

```
I:=1
found:=false
While (I<=N AND NOT found) do
    If item==A[I] Then
        Found:=item
    End if
    I=I+1
End while
Return found
```

3)

```
K:=2 and S:= 1
While K <=N do
    S← S+ 1/K
    K=K+2
End While
return S
```

4)

```
fact:= 1
for I ← 1 to N do
    fact← fact * I
End for
return fact
```

5)

```
count := 0
for I := 0 to N do
    for J := 0 to I to do
        count:=count+1
    End for
End for
```

**Note:**

➤ Delivery of Assignment (1)

❖ **Due date:** MO 16-NOV

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