



Department of Statistics & Computer Science, University of Kelaniya
ACADEMIC YEAR – 2020/2021
COSC / COST 11023 – Fundamentals of Programming
Lab Session – 01

Throughout this lab session, you will learn to draw flow charts using an online tool.

Draw flowcharts for the following problems using the <https://app.diagrams.net/> website and upload your completed flowchart into the CAL relevant folder.

1. Find the largest integer of two given integers.
2. Calculate the Interest of a bank Fixed Deposit (FD).

Pseudocode:

Read amount
Read years
Read rate
Calculate the interest with formula "Interest=Amount*Years*Rate/100"
Print interest

3. Determine and output whether an input integer (N) is Even or Odd.

Pseudocode:

Read number N
Divide the number by 2 and get the remainder value
If remainder is equal to 0 then number N is even, else number N is odd
Print output.

4. Determine whether a student passed the Exam or Not:

Pseudocode:

Input grades of 4 courses M1, M2, M3 and M4
Calculate the average grade with formula "Grade=(M1+M2+M3+M4)/4"
If the average grade is less than 60, print "FAIL", else print "PASS".

5. Print Hello World 10 times.

Pseudocode:

Initialize count = 0
Print Hello World
Increment count by 1
Is count < 10 go to step 2 else Stop

6. Calculate the commission rate for a salesperson, given the amount of sales. When the salesperson has sold less than or equal to 20,000 worth of goods, the commission is 2%. When the sales total more the 20,000 and less than or equal to 40,000 the commission is 4%. When sales total is more than 40,000 and less than or equal to 60,000, the commission is 7%. When the person has sold more than 60,000 the commission is 10%.

Sales	Commission
<= 20,000	0.02
20,001 - 40,000	0.04
40,001 - 60,000	0.07
> 60,000	0.10