

## Lab 1: Introduction to Python

Python is a widely used high-level, general-purpose, interpreted, dynamic programming language. Its design philosophy emphasizes code readability, and its syntax allows programmers to express concepts in fewer lines of code than possible in languages such as C++ or Java.

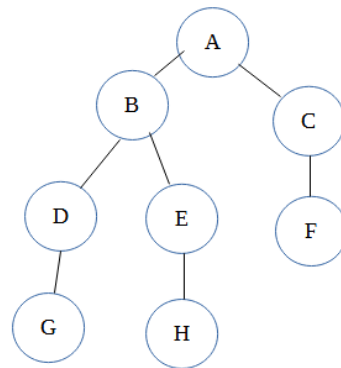
### Lab Work:

- 1)WAP to check if an input number is odd or even
- 2)WAP to input the percentage and display the division
  - $\geq 80 \rightarrow$  Distinction
  - $\geq 65 \rightarrow$  First Division
  - $\geq 55 \rightarrow$  Second Division
  - $\geq 40 \rightarrow$  Third Division
  - $< 40 \rightarrow$  Fail
- 3)WAP to calculate sum, diff, product and quotient between two input numbers using a single function.
- 4)WAP to display prime numbers from 1 to 100
- 5)WAP to enter the marks of 10 students and display it.
- 6)WAP to calculate the factorial of an input number.
- 7)WAP to ask for a sentence and count the number of words.
- 8)WAP to sort the list {5, 4, 11, 13, 51}
- 9)WAP program to sum all the items in a list.
- 10)WAP program to get the largest number from a list.
- 11)WAP to ask for a sentence and calculate the frequency of characters in the sentences.
- 12)WAP to find the sum of all items in a dictionary

**Input:** {'a': 100, 'b':200, 'c':300}  
**Output:** 600

**Input:** {'x': 25, 'y':18, 'z':45}  
**Output:** 88
- 13) You are given a string and your task is to *swap cases*. In other words, convert all lowercase letters to uppercase letters and vice versa.
- 14) WAP to represent the following graphs using a dictionary.

a)



b)

