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.
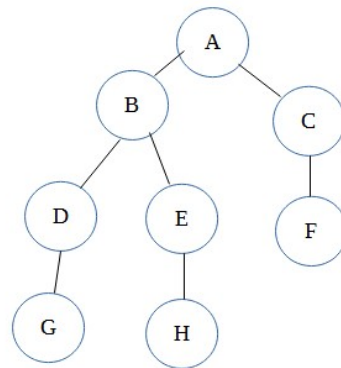
Lab Work:

1)WAP to check if an input number is odd or even

2)WAP to input the percentage and display the division

>=80 → Distinction

>=65 → First Division

>=55 → Second Division

>=40 → Third Division

<40 → 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)