#### Instructions

- 1. This is an individual assignment.
- 2. Your code must completely be your own. You are not allowed to take guidance from any general-purpose code or problem specific code meant to solve these or related problems. Remember, it is easy to detect this kind of plagiarism.

Date: 22-11-2022

- 3. All the PROBLEMS are COMPULSORY.
- 4. **Write only a single main function**. You can call the required functions from the main function.
- 4. Name the file as follows: S2021xxxxx\_A13.c
- 5. DO NOT zip. **Upload a single .c file** directly to your submission in the common Google classroom.

## Question 1: [5 marks]

#### String 1 =

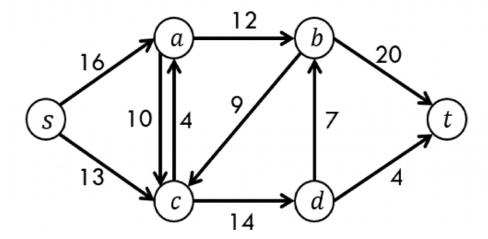
TTCTACGGGGGGAGACCTTTACGAATCACACCGGTCTTCTTTGTTCTAGCCGCTCTTTTTCATCAGTT GCAGCTAGTGCATAATTGCTCACAAACGTATC

#### String 2 =

TCTACGGGGGGCGTCATTACGGAATCCACACAGGTCGTTATGTTCATCTGTCTCTTTTCACAGTTGCGGCTTGTGCATAATGCTCACGAACGTATC

Write a function to find the length of the longest common subsequence for two strings.

### Question 2: [5 marks]



Write a function to find the maximum flow of the given graph using a simple maximum flow algorithm.

# **Practice Question:**

Solve the flow network given in Qn 2. using the Ford-Fulkerson algorithm.