CSE 208 (Data Structures and Algorithms II Sessional)

Offline Assignment 5

Submission deadline: Week 7

All Sections

Implement Ford-Fulkerson method for solving the maximum flow problem (Cormen et al.– Chapter 26)

Input: A directed graph with edge capacities, a source *s* and a sink *t*

Output: The value of maximum flow, flow along each edge and edges of a min-cut

Requirements:

- Implement necessary code for graph representation without using standard template libraries.
- Make sure the running time of the algorithm is **O (*Ef*)** where **E** is the number of edges in the graph and **f** is the maximum flow in the graph.
- Use file operations for input and output.
- You may need to use your implementation for the online assignment. So make sure your code is well-organized so you can use it for solving other problems