Foundations of Computer Science
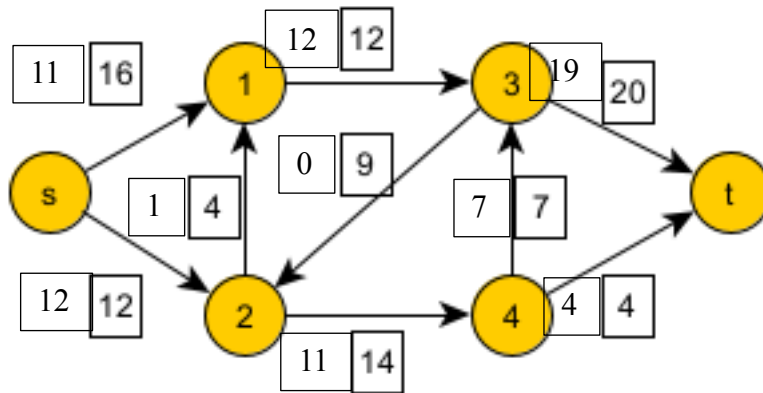ICA: Max Flow
last updated: March 30, 2022

Consider the flow network below with source *s*, sink *t* and capacities in boxes.
For example, the capacity between the source and node 1 is 16.

Instructions: Provide answers to each question and submit your document (word or pdf format) through Collab.

1) Write the flow on each edge to maximize flow over this network.

2) What is the maximum flow?
      - The maximum flow for this network is 23

3) For all nodes that are not source or sink, what can be said about their net flow?
      - The net flow for nodes 1,2,3, and 4 is zero

4) What can be said about the net flow for the source?

There is a net outflow from the source of 23.

5) What can be said about the net flow for the sink?

There is a net inflow to the sink of 23.

Rubric: 100 total points

1) 10 points for correct flow on each edge (90 pts total)

2) 5 points

3) 2.5 points

4) 2.5 points

5) 1 point