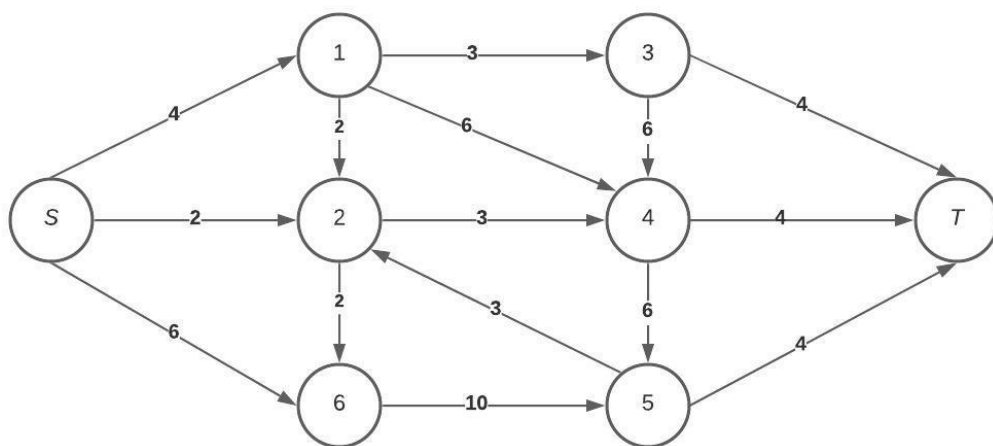


## Q1 Ford Fulkerson

15 Points

In addition to identifying the maximum-flow of a graph, Ford-Fulkerson also identifies the minimum-cut of a graph, the smallest total weight of the edges which if removed would disconnect the source from the sink. In fact, the maximum-flow of a graph is equal to the sum of the final residual capacity of the edges in the minimum cut



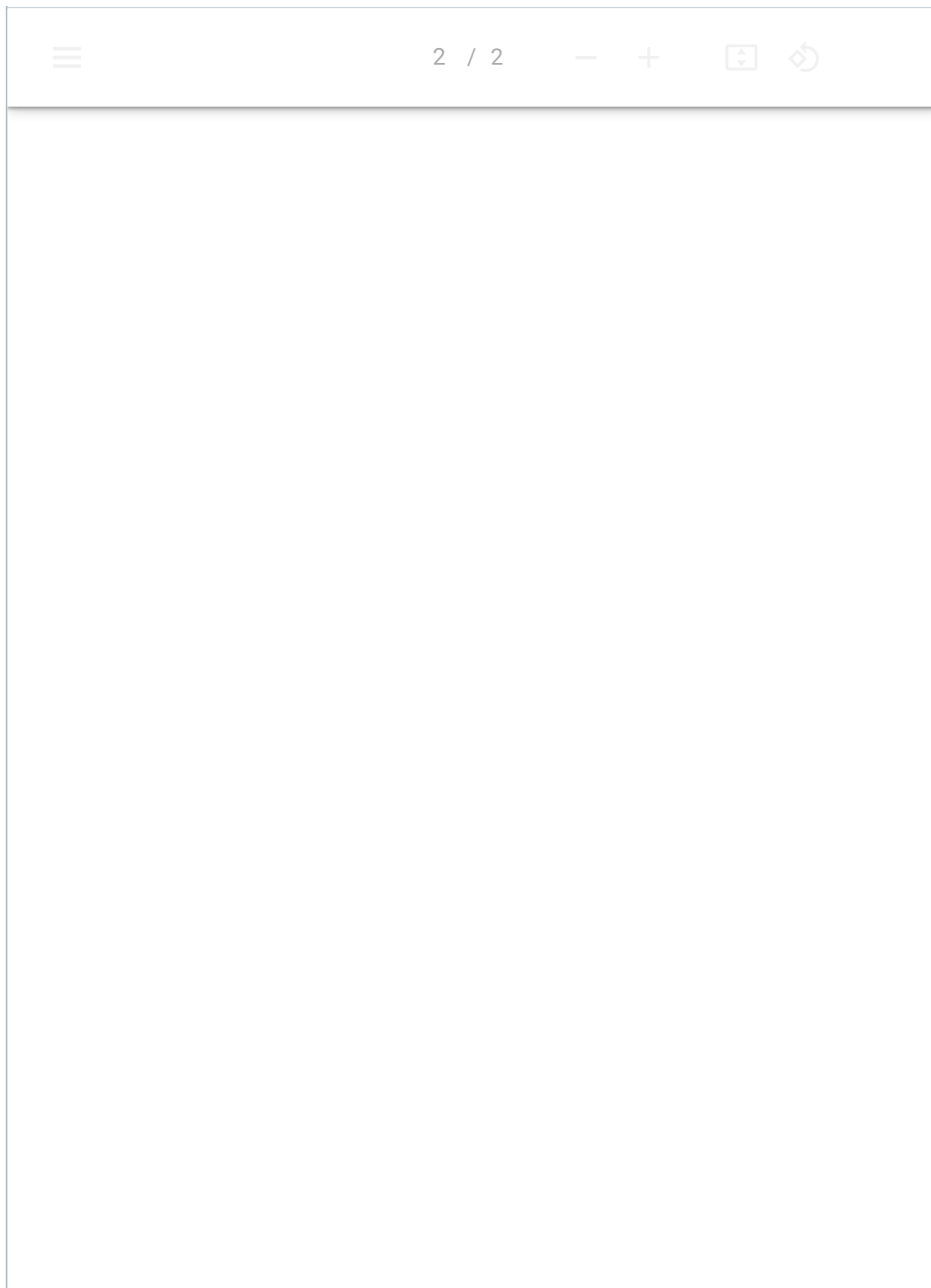
### Q1.1

10 Points

Determine the maximum flow and residual graph of the flow network above

▼ Quiz7.pdf

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**Q1.2**

5 Points

Using your residual graph, determine the edges that make up the minimum  $s \rightarrow t$  cut

The max-flow min-cut theorem states that in a flow network, the amount of maximum flow is equal to capacity of the minimum cut.

min cut  $s \rightarrow t$  is:  $\{s, 2, 5, 6\}$   
Please also refer to the min cut graph for my attached file in Q1.1.

# Quiz 7 - NF

● GRADED

STUDENT

Kejian Tong

TOTAL POINTS

10 / 15 pts

QUESTION 1

Ford Fulkerson

10 / 15 pts

1.1 (no title)

10 / 10 pts

1.2 (no title)

R 0 / 5 pts