

## Report

Push-relabel is generally more efficient than Ford-Fulkerson algorithm.

Push-relabel:  $O(V^2E)$

Ford-Fulkerson:  $O(VE^2)$

Push-relabel works independently for each node, while Ford-Fulkerson finds the optimal flow by examining the entire graph.

In push-relabel, inflow exceeding is allowed until reaching to the last node. In Ford-Fulkerson, excess flow must be zero for all nodes except first and last node.