# The Algorithm

Define .

We reduce this to a max flow problem. We construct a graph. There is a source , which leads to nodes (first layer), which leads to nodes (second layer), which leads to a sink . We label each node in the first layer as for candidate and his available time slot . The edge weights from to the first layer are all . There is an edge from a node in the first layer to a node in the second layer if recruiter is qualified to interview candidate and the recruiter is available at time slot . Run Ford-Fulkerson on this graph. If the max flow is less than the number of candidates , then there is no interview schedule where every candidate gets interviewed.