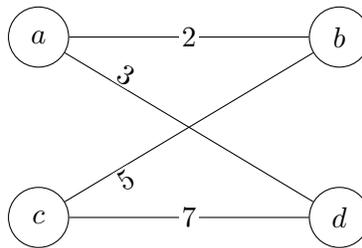# In-Class Worksheet

CS 181 Advanced Algorithms — Spring 2026

Instructions. Use the Hungarian algorithm to compute a min-cost perfect matching in G. When there are ties for which vertex to process, proceed alphabetically (this is just to make the example more interesting).

Biparite graph G:

Apply Hungarian algorithm to find the min-cost perfect matching in G. First initialize the matching and prices, then make updates by searching for a good path (an alternating tight path between unmatched nodes). If no good path is found, update the prices, creating a new tight edge. The final matching should have cost 8. Use the space below to record intermediate steps in the algorithm.