1) Consider the graph below. Find a spanning tree using a depth first search starting at vertex S. There are two possible answers depending on your vertex ordering.

2) Consider the graph below. Find a spanning tree using a breadth first search starting at vertex S.

3) Consider the graph below. Find a spanning tree using a best first search starting at vertex S. There are two possible answers depending on your vertex ordering.

4) Consider the graph below. Find a spanning tree using Dijkstra’s algorithm to find shortest paths, starting at vertex S.