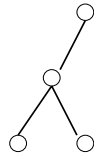# Edge Classification for DFS
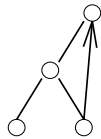
What about the other edges in the graph? Where can they go on a search?

Every edge is either:
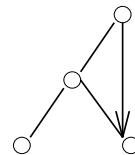
1. A Tree Edge

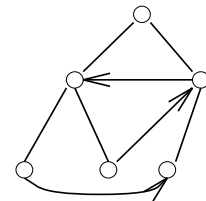3. A Forward Edge
   to a decendant

2. A Back Edge
   to an ancestor

4. A Cross Edge
   to a different node

On any particular DFS or BFS of a directed or undirected graph, each edge gets classified as one of the above.