Last Time

• Priority Queue – Get the largest/smallest value in a data structure quickly

• Heap – An implementation of a priority queue in tree form
  – `swim()` and `sink()` functions
Basic Graph Terminology

• Graph
• Vertex
• Edge
• Self-loop edge
• Parallel edge
• Degree
• Subgraph

• Path
• Simple path
• Connected/Disconnected
• Undirected/Directed
• Cyclic/Acyclic
• Tree
Challenge #1

• How can we store the data contained in our graph in a way that both is time- and space-efficient?
  – Adjacency matrix
  – Edge list
  – Adjacency list
Challenge #2

• How can we determine if a path exists that begins at node $s$ and ends at node $t$?
  – Depth-First Search
  – Breadth-First Search
Any Questions?