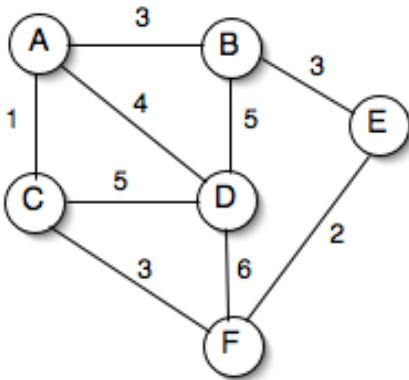


Minimum Spanning Trees:

Find the minimum spanning tree using both Prim's Algorithm and Kruskal's Algorithm.



Prim's

Vertex	Known?	Cost	Previous
A			
B			
C			
D			
E			
F			

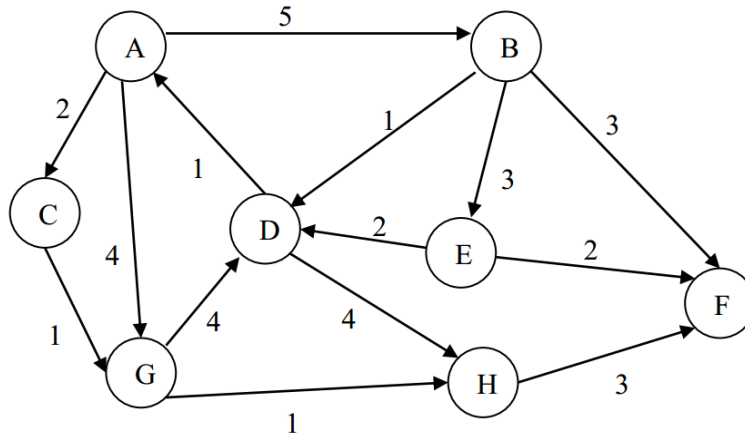
Kruskal's

List out sorted edges (by weight):

List out edges in MST:

Dijkstra's

Use Dijkstra's Algorithm to evaluate the shortest path from A to any other node in the graph below.



Order vertices marked as known:

Vertex	Known?	Cost	Path
A			
B			
C			
D			
E			
F			
G			
H			

Runtimes:

Prim's: $O(|E| \log |V|)$

Kruskal's: $O(|E| \log |E|)$
 $O(|E|)$

*sorting

*iterating through edges for union-find

Dijkstra's: $O(|E| \log |V|)$