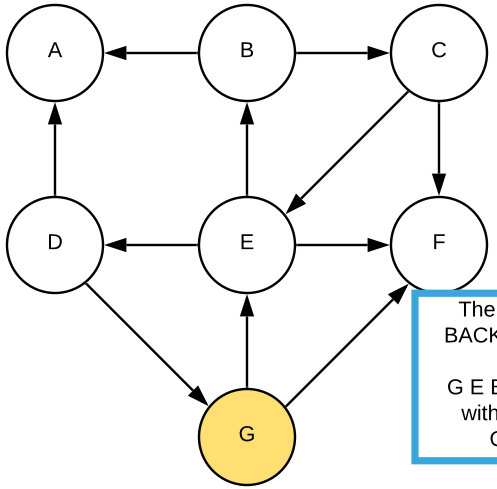
Phillip Escandon
Assignment 6

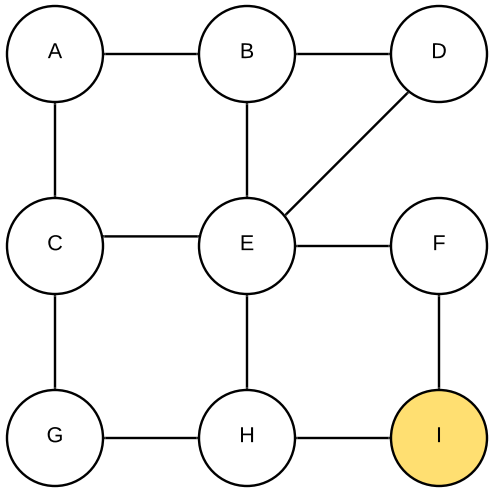
Part 2
DFS



Go forward until you are stuck then backtrack until you can continue

The following include BACKTRACKING to the Bold Node:
G E B A **B** C F **C B E** D
without backtracking
G E B A C F D

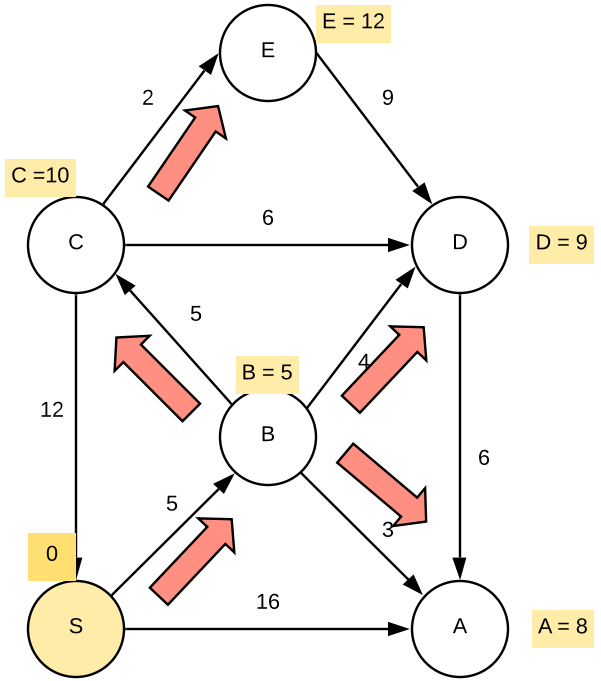
Part 3
BFS



Increase one edge at a time to the following nodes

I F H E G B C D A

Part 4
Dijkstra's Algorithm



	Remove min()	Cloud	Relax
1.	S	S	A = 16 B = 5 C = 12
2.	B	S,B	C =10 (updated) Predecessor D = 9 A = 8 (updated) predecessor
3.	A	S,B,A	Nothing done all inwards
4.	D	S,B,A,D	A =15 (no update)
5.	C	S,B,A,D,C	E = 12
6.	E	S,B,A,D,C,E	D = 21 (not updated) D = 9

Visualized as a priority queue that began with all node = infinity, with the starting node at 0.. Each iteration the minimum was removed, and the edges were relaxed. This was an iterative process until all nodes were processed

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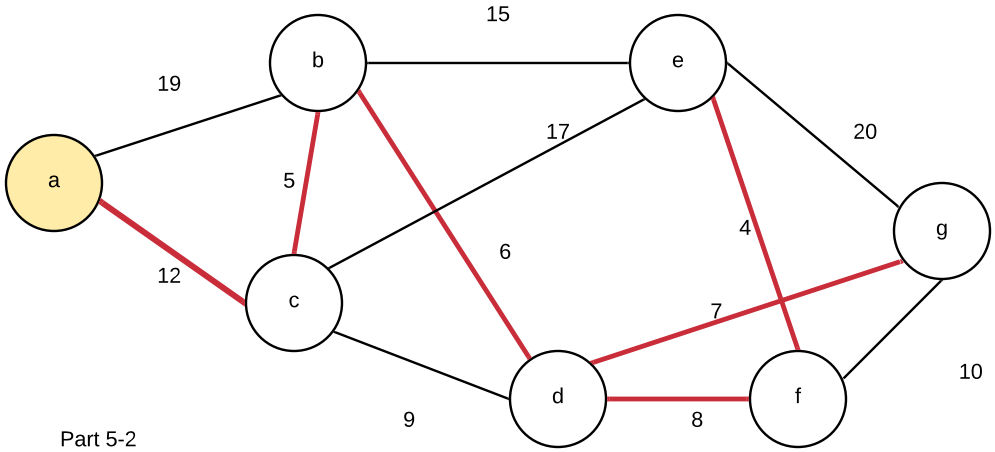
Run the Prim-Jarnik Algorithm



Part 5-1
Sequence brought into the cloud:
a
c
b
d
g
f
e

Part 5-2
Show min spanning tree: which is just a collection of minimum edges while node are being inserted into the cloud based on bridge edges:

Min Spanning tree shown in Red.