Lab W3D5

1. What is the adjacency matrix of the weighted graph G = (V,E) shown in Figure 1.
2. Find the shortest path from A to all other vertices using Dijkstra's algorithm (Slide 12). (Figure 1)
3. What is the time complexity?
4. Find a minimum spanning tree using Kruskal's Algorithm (Figure 1)
5. What is the time complexity?

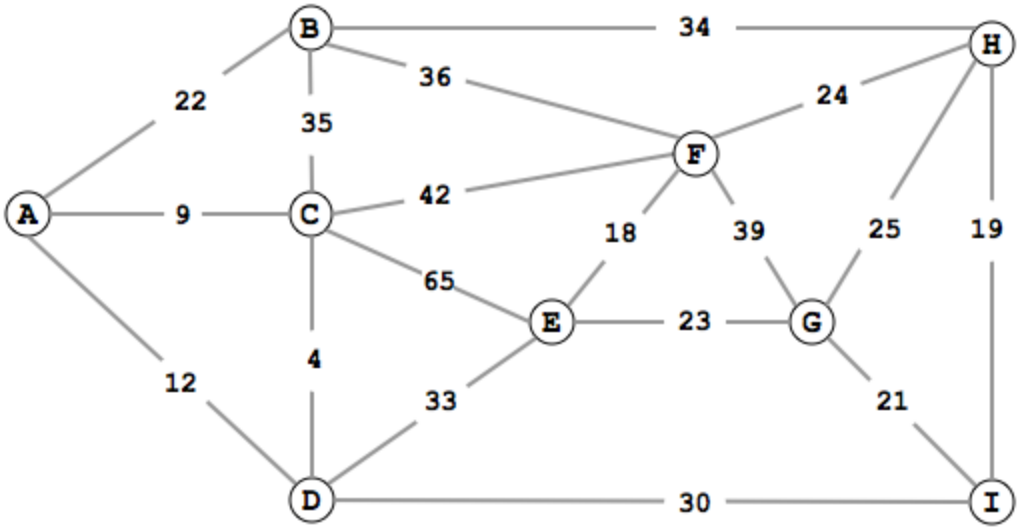

Figure 1

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6. What is the adjacency matrix of the weighted directed Acyclic graph G = (V,E) shown in Figure 2.
7. Find the shortest path from P to U. (Figure 2). (Use the algorithm starting at slide 33).
8. What is the time complexity
9. Can you use Dijkstra's algorithm (Slide 12) to find the shortest path from P to U? (Figure 2).
10. If "Yes", find the shortest path from P to U using Dijkstra's algorithm (Slide 12) (Figure 2).

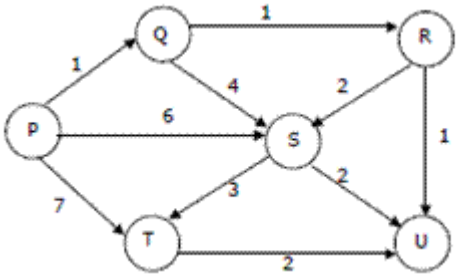

Figure 2