Worksheet 42 - Group 1

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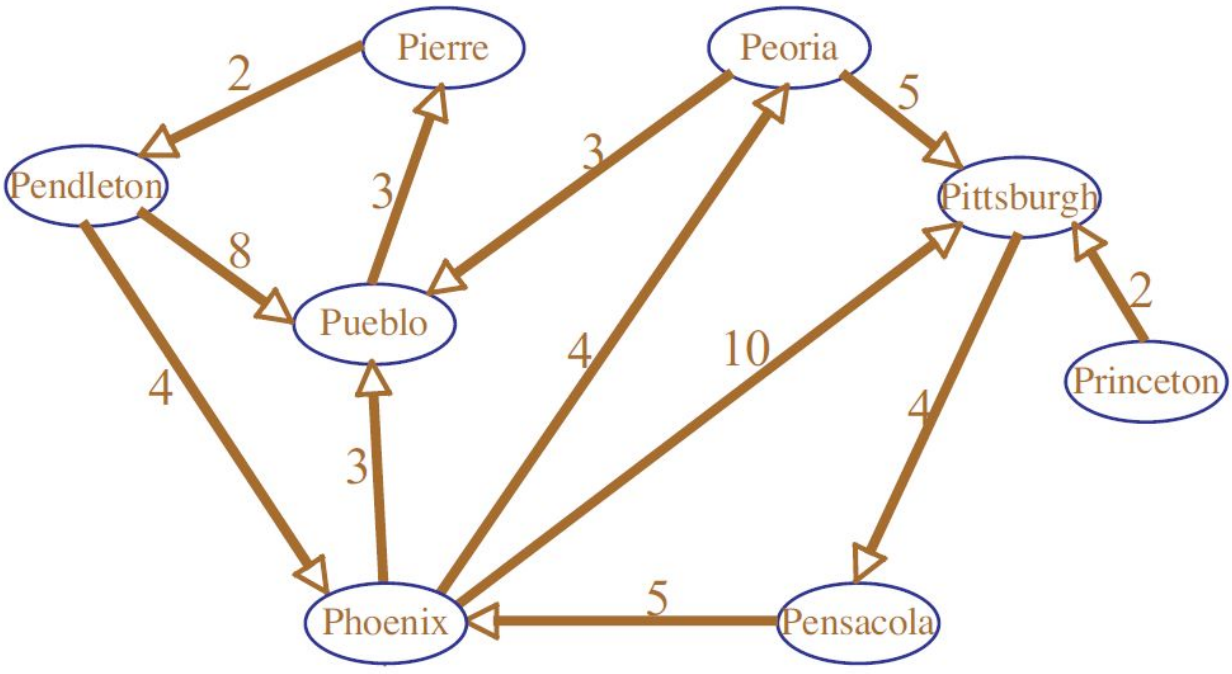
Worksheet 42: Dijkstra's Algorithm

In this worksheet, we will be modeling Dijkstra's Algorithm for the graph which appears below. More specifically, we'll be calculating the shortest distances from Pensacola to its reachable nodes.



The steps for Dijkstra's Algorithm are shown in the table that appears on the following page.

Iteration	Priority Queue	Reachable
0	Pensacola (0)	--
1	Phoenix (5)	Pensacola (0)
2	Pueblo (8), Peoria (9), Pittsburgh (15)	Phoenix (5)
3	Peoria (9), Pierre (11), Pittsburgh (15)	Pueblo (8)
4	Pierre (11), Pittsburgh (14), Pittsburgh (15)	Peoria (9)
5	Pendleton (13), Pittsburgh (14), Pittsburgh (15)	Pierre (11)
6	Pittsburgh (14), Pittsburgh (15)	Pendleton (13)
7	Pittsburg (15)	Pittsburgh (14)
8	--	--

Piazza Discussion
https://piazza.com/class/ib2kus4hsie528?cid=317