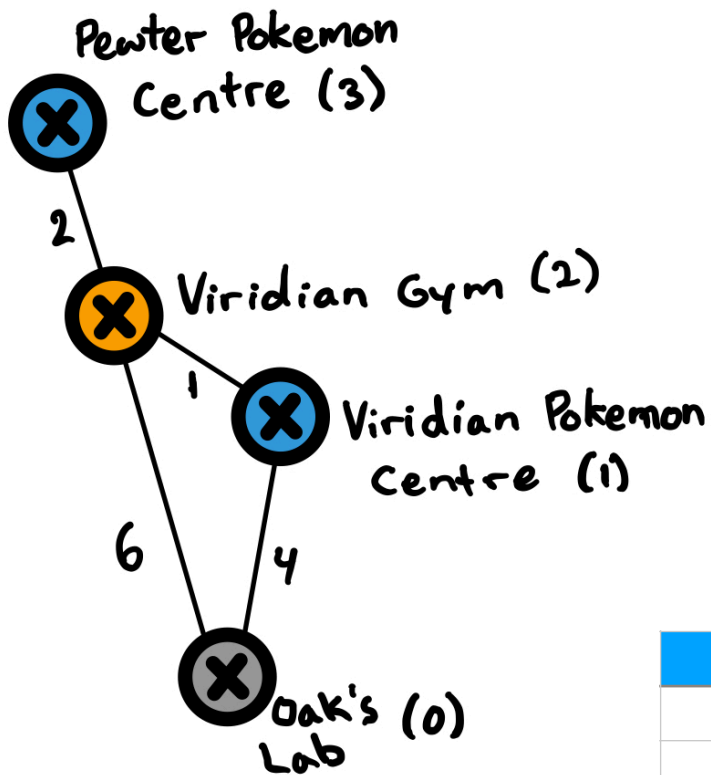


COIS 4310H
Assignment #3 — Distance Vector Algorithm

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Sample Network Diagram



Link Table

	0	1	2	3
0	0	4	6	-
1	4	0	1	-
2	6	1	0	2
3	-	-	2	0

Distance Vectors

Expected Results	Actual Results
0: Oak's Lab 0 FROM Oak's Lab 4 FROM Oak's Lab 5 FROM Viridian Pokemon Centre 7 FROM Viridian Gym	<pre> 0: Oak's Lab ----- 0 FROM: Oak's Lab (0) 4 FROM: Oak's Lab (0) 5 FROM: Viridian Pokemon Centre (1) 7 FROM: Viridian Gym (2) </pre>
1: Viridian Pokemon Centre 4 FROM Viridian Pokemon Centre 0 FROM Viridian Pokemon Centre 1 FROM Viridian Pokemon Centre 3 FROM Viridian Gym	<pre> 1: Viridian Pokemon Centre ----- 4 FROM: Viridian Pokemon Centre (1) 0 FROM: Viridian Pokemon Centre (1) 1 FROM: Viridian Pokemon Centre (1) 3 FROM: Viridian Gym (2) </pre>
2: Viridian Gym 5 FROM Viridian Pokemon Centre 1 FROM Viridian Gym 0 FROM Viridian Gym 2 FROM Viridian Gym	<pre> 2: Viridian Gym ----- 5 FROM: Viridian Pokemon Centre (1) 1 FROM: Viridian Gym (2) 0 FROM: Viridian Gym (2) 2 FROM: Viridian Gym (2) </pre>
3: Pewter Pokemon Centre 7 FROM Viridian Gym 3 FROM Viridian Gym 2 FROM Pewter Pokemon Centre 0 FROM Pewter Pokemon Centre	<pre> 3: Pewter Pokemon Centre ----- 7 FROM: Viridian Gym (2) 3 FROM: Viridian Gym (2) 2 FROM: Pewter Pokemon Centre (3) 0 FROM: Pewter Pokemon Centre (3) </pre>

Note: All tests below are based on the above unmodified graph (i.e. if a test changes the network, assume the changes are undone before the next test).

Remove link from 1 (Viridian Pokemon Centre) to 2 (Viridian Gym)

Expected Results	Actual Results
0: Oak's Lab 0 FROM Oak's Lab 4 FROM Oak's Lab 6 FROM Oak's Lab 8 FROM Viridian Gym 1: Viridian Pokemon Centre 4 FROM Viridian Pokemon Centre 0 FROM Viridian Pokemon Centre 10 FROM Oak's Lab 12 FROM Viridian Gym 2: Viridian Gym 6 FROM Viridian Gym 10 FROM Oak's Lab 0 FROM Viridian Gym 2 FROM Viridian Gym 3: Pewter Pokemon Centre 8 FROM Viridian Gym 12 FROM Oak's Lab 2 FROM Pewter Pokemon Centre 0 FROM Pewter Pokemon Centre	<pre> 0: Oak's Lab ----- 0 FROM: Oak's Lab (0) 4 FROM: Oak's Lab (0) 6 FROM: Oak's Lab (0) 8 FROM: Viridian Gym (2) 1: Viridian Pokemon Centre ----- 4 FROM: Viridian Pokemon Centre (1) 0 FROM: Viridian Pokemon Centre (1) 10 FROM: Oak's Lab (0) 12 FROM: Oak's Lab (0) 2: Viridian Gym ----- 6 FROM: Viridian Gym (2) 10 FROM: Oak's Lab (0) 0 FROM: Viridian Gym (2) 2 FROM: Viridian Gym (2) 3: Pewter Pokemon Centre ----- 8 FROM: Viridian Gym (2) 12 FROM: Oak's Lab (0) 2 FROM: Pewter Pokemon Centre (3) 0 FROM: Pewter Pokemon Centre (3) </pre>

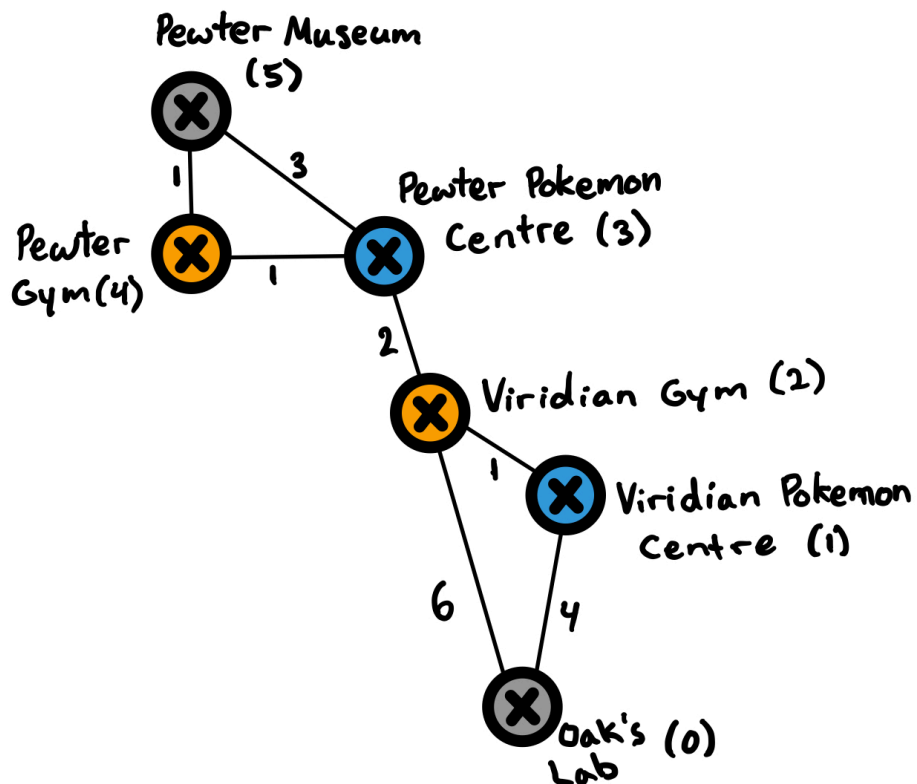
Remove last router (Pewter Pokemon Centre)

Expected Results	Actual Results
0: Oak's Lab 0 FROM Oak's Lab 4 FROM Oak's Lab 5 FROM Viridian Pokemon Centre 1: Viridian Pokemon Centre 4 FROM Viridian Pokemon Centre 0 FROM Viridian Pokemon Centre 1 FROM Viridian Pokemon Centre 2: Viridian Gym 5 FROM Viridian Pokemon Centre 1 FROM Viridian Gym 0 FROM Viridian Gym	<pre> 0: Oak's Lab ----- 0 FROM: Oak's Lab (0) 4 FROM: Oak's Lab (0) 5 FROM: Viridian Pokemon Centre (1) 1: Viridian Pokemon Centre ----- 4 FROM: Viridian Pokemon Centre (1) 0 FROM: Viridian Pokemon Centre (1) 1 FROM: Viridian Pokemon Centre (1) 2: Viridian Gym ----- 5 FROM: Viridian Pokemon Centre (1) 1 FROM: Viridian Gym (2) 0 FROM: Viridian Gym (2) </pre>

Remove middle router (Viridian Pokemon Centre)

Expected Results	Actual Results
0: Oak's Lab 0 FROM Oak's Lab 8 FROM Viridian Gym 6 FROM Oak's Lab	<pre> 0: Oak's Lab ----- 0 FROM: Oak's Lab (0) 8 FROM: Viridian Gym (2) 6 FROM: Oak's Lab (0) </pre>
1: Pewter Pokemon Centre 8 FROM Viridian Gym 0 FROM Pewter Pokemon Centre 2 FROM Pewter Pokemon Centre	<pre> 1: Pewter Pokemon Centre ----- 8 FROM: Viridian Gym (2) 0 FROM: Pewter Pokemon Centre (1) 2 FROM: Pewter Pokemon Centre (1) </pre>
2: Viridian Gym 6 FROM Viridian Gym 2 FROM Viridian Gym 0 FROM Viridian Gym	<pre> 2: Viridian Gym ----- 6 FROM: Viridian Gym (2) 2 FROM: Viridian Gym (2) 0 FROM: Viridian Gym (2) </pre>

Adding to the Network



Adding the link from Pewter Gym to Pewter Pokemon Centre

Expected Results	Actual Results
BEFORE 3: Pewter Pokemon Centre 7 FROM Viridian Gym 3 FROM Viridian Gym 2 FROM Pewter Pokemon Centre 0 FROM Pewter Pokemon Centre 4 FROM Pewter Museum 3 FROM Pewter Pokemon Centre 4: Pewter Gym 11 FROM Viridian Pokemon Centre 7 FROM Viridian Gym 6 FROM Pewter Pokemon Centre 4 FROM Pewter Museum 0 FROM Pewter Gym 1 FROM Pewter Gym 5: Pewter Museum 10 FROM Viridian Pokemon Centre 6 FROM Viridian Gym 5 FROM Pewter Pokemon Centre 3 FROM Pewter Museum 1 FROM Pewter Museum 0 FROM Pewter Museum	<pre> 3: Pewter Pokemon Centre ----- 7 FROM: Viridian Gym (2) 3 FROM: Viridian Gym (2) 2 FROM: Pewter Pokemon Centre (3) 0 FROM: Pewter Pokemon Centre (3) 4 FROM: Pewter Museum (5) 3 FROM: Pewter Pokemon Centre (3) 4: Pewter Gym ----- 11 FROM: Pewter Museum (5) 7 FROM: Pewter Museum (5) 6 FROM: Pewter Museum (5) 4 FROM: Pewter Museum (5) 0 FROM: Pewter Gym (4) 1 FROM: Pewter Gym (4) 5: Pewter Museum ----- 10 FROM: Pewter Pokemon Centre (3) 6 FROM: Pewter Pokemon Centre (3) 5 FROM: Pewter Pokemon Centre (3) 3 FROM: Pewter Museum (5) 1 FROM: Pewter Museum (5) 0 FROM: Pewter Museum (5) </pre>

Expected Results	Actual Results
AFTER 3: Pewter Pokemon Centre 7 FROM Viridian Gym 3 FROM Viridian Gym 2 FROM Pewter Pokemon Centre 0 FROM Pewter Pokemon Centre 1 FROM Pewter Pokemon Centre 2 FROM Pewter Gym 4: Pewter Gym 8 FROM Viridian Pokemon Centre 4 FROM Viridian Gym 3 FROM Pewter Pokemon Centre 1 FROM Pewter Gym 0 FROM Pewter Gym 1 FROM Pewter Gym 5: Pewter Museum 10 FROM Viridian Pokemon Centre 6 FROM Viridian Gym 5 FROM Pewter Pokemon Centre 2 FROM Pewter Gym 1 FROM Pewter Museum 0 FROM Pewter Museum	<pre> 3: Pewter Pokemon Centre ----- 7 FROM: Viridian Gym (2) 3 FROM: Viridian Gym (2) 2 FROM: Pewter Pokemon Centre (3) 0 FROM: Pewter Pokemon Centre (3) 1 FROM: Pewter Pokemon Centre (3) 2 FROM: Pewter Gym (4) 4: Pewter Gym ----- 8 FROM: Pewter Pokemon Centre (3) 4 FROM: Pewter Pokemon Centre (3) 3 FROM: Pewter Pokemon Centre (3) 1 FROM: Pewter Gym (4) 0 FROM: Pewter Gym (4) 1 FROM: Pewter Gym (4) 5: Pewter Museum ----- 9 FROM: Pewter Gym (4) 5 FROM: Pewter Gym (4) 4 FROM: Pewter Gym (4) 2 FROM: Pewter Gym (4) 1 FROM: Pewter Museum (5) 0 FROM: Pewter Museum (5) </pre>