

CSE220: Data Structures (Lab)
Fall 2024
Lab Quiz - 07

В

Duration: 30 Minutes

Name:	ID:	Section:
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## Question [15 Points]

Write a Python or Java function called **reachingToFinalDestination**. The function takes **the given graph** represented as an adjacency matrix (a 2D list where graph[i][j] = 1 means there is a directed edge from node i to node j, and graph[i][j] = 0 means there is no edge from node i to node j). Also, the function takes a **destination** (the index of the destination node).

For the given graph, the function should return *True* if there exists any path (from **node 0** to the given destination **node 4**) and *False* otherwise.

Note: You have to manually build an adjacency matrix at first to represent the following directed unweighted graph. Also, you cannot use any built-in function, tuple, or dictionary. But you may build any helper function. And, assume that any code portion is not implemented.

Given Graph	Input of function	Output	Explanation
2	graph [as an adjacency matrix] destination [here, 4 as the index of the destination node]	True	The graph provided is a directed graph where node 0 can reach node 4 through the path $0 \rightarrow 1 \rightarrow 2 \rightarrow 3 \rightarrow 4$ (using 2D list traversal)

\*Hint: Solving this question is much easier than getting out of bed this winter morning.