

Assignment-4

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Path Storage

The implementation of path storage using adjacency matrix does work for directed graphs. For example if an edge goes from 0 to 1, in the matrix it will be shown by the entry $(0,1) = 1$ whereas entry $(1,0) = 0$ this means there is an edge from 0 to 1 but not from 1 to 0 which means this is a directed edge. In this way we can use this method to represent paths in directed graphs.

The time complexity can be reduced to $O(V+E)$ using adjacency list which will be a linked list that stores the destination from any node to others.