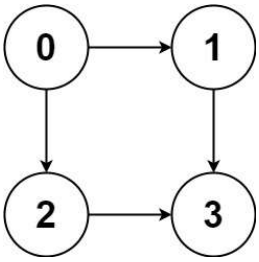
797. All Paths From Source to Target

Medium 3215 106 Add to List Share

Given a directed acyclic graph (**DAG**) of `n` nodes labeled from `0` to `n - 1`, find all possible paths from node `0` to node `n - 1` and return them in **any order**.

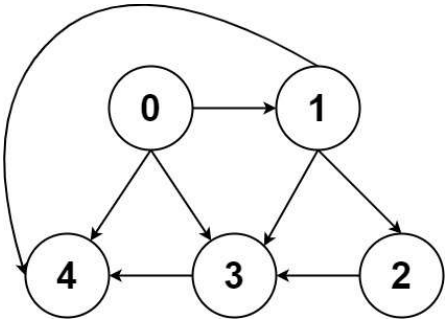
The graph is given as follows: `graph[i]` is a list of all nodes you can visit from node `i` (i.e., there is a directed edge from node `i` to node `graph[i][j]`).

Example 1:




```
Input: graph = [[1,2],[3],[3],[]]
Output: [[0,1,3],[0,2,3]]
Explanation: There are two paths: 0 -> 1 -> 3 and 0 -> 2 -> 3.
```

Example 2:




```
Input: graph = [[4,3,1],[3,2,4],[3],[4],[]]
Output: [[0,4],[0,3,4],[0,1,3,4],[0,1,2,3,4],[0,1,4]]
```

Example 3:

```
Input: graph = [[1],[]]
Output: [[0,1]]
```

Example 4:

```
Input: graph = [[1,2,3],[2],[3],[]]
Output: [[0,1,2,3],[0,2,3],[0,3]]
```

Example 5:

```
Input: graph = [[1,3],[2],[3],[]]
Output: [[0,1,2,3],[0,3]]
```

Constraints:

- `n == graph.length`
- `2 <= n <= 15`
- `0 <= graph[i][j] < n`
- `graph[i][j] != i` (i.e., there will be no self-loops).
- All the elements of `graph[i]` are **unique**.
- The input graph is **guaranteed** to be a **DAG**.

Accepted 212,104 Submissions 263,963

Seen this question in a real interview before? Yes No

Companies

Related Topics

Similar Questions

```java
class Solution {
    public List<List<Integer>> allPathsSourceTarget(int[][] graph) {

    }
}
```