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i

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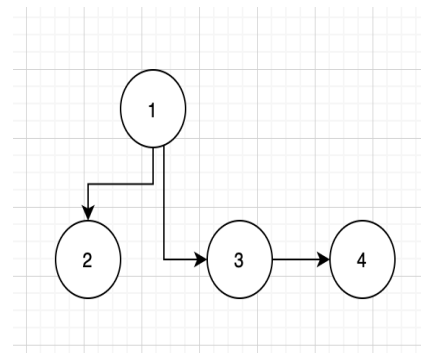
2

2. Traverse directed graph

Having a [Directed Graph](#), with nodes represented by integers, and edges by a collection of node pairs.

Implement a function **traverse(starting_node, graph)** that, given a **starting_node** and a **graph**, returns an array containing all descendant nodes of **starting_node**.

For example, having this graph:



graph = [[1, 2], [1, 3], [3, 4]]

C++

Autocomplete Ready ⓘ



```

1  #include <bits/stdc++.h> ...
10
11  /*
12   * Complete the 'traverse' function below.
13   *
14   * The function is expected to return an INTEGER_ARRAY.
15   * The function accepts following parameters:
16   * 1. INTEGER starting_node
17   * 2. 2D_INTEGER_ARRAY graph
18   */
19
20  vector<int> traverse(int starting_node, vector<vector<int>> gra
21
22  }
23
24  int main()
25  {
26      ofstream fout(getenv("OUTPUT_PATH"));
27
28      string starting_node_temp;
29      getline(cin, starting_node_temp);
30
31      int starting_node = stoi(ltrim(rtrim(starting_node_temp)));
32
33      string graph_rows_temp;
34      getline(cin, graph_rows_temp);
35
36      int graph_rows = stoi(ltrim(rtrim(graph_rows_temp)));
37
38      string graph_columns_temp;
39      getline(cin, graph_columns_temp);
40
41      int graph_columns = stoi(ltrim(rtrim(graph_columns_temp)));
42

```