Chapter 10: Graph Traversals

Section 10.1: Depth First Search traversal function

The function takes the argument of the current node index, adjacency list (stored in vector of vectors in this example), and vector of boolean to keep track of which node has been visited.

```
void dfs(int node, vector<vector<int>>* graph, vector<bool>* visited) {
    // check whether node has been visited before
    if((*visited)[node])
        return;

    // set as visited to avoid visiting the same node twice
    (*visited)[node] = true;

    // perform some action here
    cout << node;

    // traverse to the adjacent nodes in depth-first manner
    for(int i = 0; i < (*graph)[node].size(); ++i)
        dfs((*graph)[node][i], graph, visited);
}
```