

```

    include <iostream>
#include
<list>
#include
<stack>
using
namespace
std;

// Class to represent a
graph class Graph {
    // No. of
    vertices' int
    V;

    // Pointer to an array containing adjacency listsList
    list<int>* adj;
// A function used by topologicalSort
    void topologicalSortUtil(int v, bool
    visited[], stack<int>& Stack);

public:
    // Constructor
    Graph(int V);
// function to add an edge to
    graph void addEdge(int v,
    int w);

```

```

        // prints a Topological Sort of
/ the complete
graph void
topologicalSortUtil(
    t());
}
;

Graph::Graph(int V)
{
    this->V = V;
    adj = new
    list<int>[V];
}

void Graph::addEdge(int v, int w)
{
    // Add w to v's list.
    adj[v].push_back(w);
}

// A recursive function used by
topologicalSort void
Graph::topologicalSortUtil(int v, bool
visited[], stack<int>& Stack)
{
    // Push current vertex to stack
    // which stores result
    Stack.push(v);

```

```

}

// Mark all the vertices as
    not visited bool* visited =
    new bool[V]; for (int i = 0;
    i < V; i++)
        visited[i] = false;
// Call the recursive helper function
    // to store Topological
    // Sort starting from all
    // vertices one
    by one for (int i =
    0; i < V; i++) if
    (visited[i] ==
    false)
        topologicalSortUtil(i, visited, Stack);
// Print contents of stack
    while (Stack.empty()
    == false) {
cout << Stack.top() << " ";
        Stack.pop();
    }
}

// Driver
Code int
main()
{
    // Create a graph given in the above diagram

```

```
Graph g(6);
g.addEdge(5, 2);
g.addEdge(5, 0);
g.addEdge(4, 0);
g.addEdge(4, 1);
g.addEdge(2, 3);
g.addEdge(3, 1); cout << "Following is a Topological Sort of
the given
"

    "graph \n";

// Function Call
g.topologicalSort
(); return 0;
}
```