

```
1 class TopologicalSort {
2     static int[] topoSort(int V, ArrayList<ArrayList<Integer>> adj) {
3         // add your code here
4         ArrayList<Integer> list = new ArrayList<Integer>();
5         boolean[] visited = new boolean[V];
6         for(int i=0;i<V;i++){
7             if(!visited[i]){
8                 dfs(i,adj,visited,list);
9             }
10        }
11        int j=0;
12        int[] resultArr = new int[V];
13        for(int i=V-1;i>=0;i--){
14            resultArr[j++]=list.get(i);
15        }
16        return resultArr;
17    }
18
19    public static void dfs(int vertex,ArrayList<ArrayList<Integer>> adj,boolean[]
visited,ArrayList<Integer> list){
20        visited[vertex]=true;
21        ArrayList<Integer> cl = adj.get(vertex);
22        int len = cl.size();
23        for(int i=0;i<len;i++){
24            int nextNode = cl.get(i);
25            if(!visited[nextNode]){
26                dfs(nextNode,adj,visited,list);
27            }
28        }
29        list.add(vertex);
30    }
31 }
```