In [1]:
```
graph = {
  '5' : ['3','7'],
  '3' : ['2', '4'],
  '7' : ['8'],
  '2' : [],
  '4' : ['8'],
  '8' : []
}


visited = set()


def dfs(visited, graph, node):
    if node not in visited:
        print (node)
        visited.add(node)
        for neighbour in graph[node]:
            dfs(visited, graph, neighbour)


print("Following is the Depth-First Search")
dfs(visited, graph, '5')
```

```
Following is the Depth-First Search
5
3
2
4
8
7
```