

File Edit Format Run Options Window Help

```
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')
```

File Edit Shell Debug Options Window Help

```
Python 3.10.5 (tags/v3.10.5:f377153, Jun 6 2022, 16:14:13) [MSC v.1929 64 bit
AMD64] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/DRFR/Desktop/implement dfs.py =====
Following is the Depth-First Search
5
3
2
4
8
7
>>>
```