

**Program:**

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

visited = [] # List for visited nodes.
queue = []    #Initialize a queue
def bfs(visited, graph, node): #function for BFS
    visited.append(node)
    queue.append(node)
    while queue:          # Creating loop to visit each node
        m = queue.pop(0)
        print (m, end = " ")
        for neighbour in graph[m]:
            if neighbour not in visited:
                visited.append(neighbour)
                queue.append(neighbour)
    print("Following is the Breadth-First Search")
bfs(visited, graph, '5')  # function calling
```

## Output:

```
===== RESTART: C:/Users/nani/OneDrive/Desktop/task 1a.py  
Following is the Breadth-First Search  
5 3 7 2 4 8  
,
```