

## **EXPERIMENT:07 Write the python program to implement BFS.**

### **PROGRAM:**

```
from collections import deque

def bfs(graph, start):
    visited = set()
    queue = deque([start])

    while queue:
        node = queue.popleft()
        if node not in visited:
            print(node, end=" ")
            visited.add(node)
            queue.extend(graph[node] - visited)

# Example graph (Adjacency List)
graph = {
    'A': {'B', 'C'},
    'B': {'A', 'D', 'E'},
    'C': {'A', 'F'},
    'D': {'B'},
    'E': {'B', 'F'},
    'F': {'C', 'E'}
}

bfs(graph, 'A')
```

**OUTPUT:**

```
A B C E D F

...Program finished with exit code 0
Press ENTER to exit console. 
```