**7. Write the python program to implement BFS.**

**Program:**

from collections import deque

def bfs(graph, start):

visited = set()

queue = deque([start])

while queue:

vertex = queue.popleft()

if vertex not in visited:

print(vertex, end=' ')

visited.add(vertex)

queue.extend(neighbor for neighbor in graph[vertex] if neighbor not in visited)

# Example graph (as adjacency list)

graph = {

'A': ['B', 'C'],

'B': ['A', 'D', 'E'],

'C': ['A', 'F'],

'D': ['B'],

'E': ['B', 'F'],

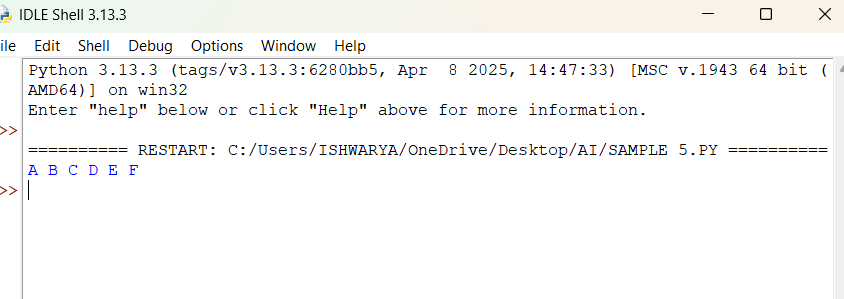
'F': ['C', 'E']

}

# Start BFS from node 'A'

bfs(graph, 'A')

**output:**

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