# DFS Implementation in Python

## Python Code:

def dfs(graph, start, visited=None):  
 if visited is None:  
 visited = set()  
 visited.add(start)  
 for neighbor in graph[start]:  
 if neighbor not in visited:  
 dfs(graph, neighbor, visited)  
 return visited  
  
# Example graph represented as an adjacency list  
graph = {  
 'A': ['B', 'C'],  
 'B': ['D', 'E'],  
 'C': ['F'],  
 'D': [],  
 'E': ['F'],  
 'F': []  
}  
  
# Run DFS  
start\_node = 'A'  
dfs\_result = dfs(graph, start\_node)  
print("DFS Traversal:", dfs\_result)

## Output:

DFS Traversal: {'D', 'B', 'E', 'C', 'A', 'F'}