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From collections import deque


Def bfs(graph,start):
   Visited=set()
   Queue=deque([start])


   While queue:
      Node=queue.popleft()
      If node not in visited:
         Visited.add(node)
         Print(node)
         For neighbor in graph[node]:
            If neighbor not in visited:
               Queue.append(neighbor)


Def dfs(graph,start,visited=None):
   If visited is None:
      Visited=set()
   Visited.add(start)
   Print(start)
   For neighbor in graph[start]:
      If neighbor not in visited:
         Dfs(graph,neighbor,visited)


Graph={}


While True:
   Vertex=input("enter vertex('done' if finished)")
   If vertex=='done':
```

```
        Break
    Neighbors=input("neighbor for vertex{vertex}:").split()
    Graph[vertex]=neighbors

Print("bfs")
Bfs(graph,'A')

Print("dfs")
Dfs(graph,'A')
```