```
############################################################
#                                                          #
#                       EXPERIMENT 1                       #
#                    Breadth First Search                  #
#                  Nathan Cordeiro 22co09                  #
#                                                          #
############################################################

graph={
'A':['B','C'],'B':['D','E'],'C':['F','G'],'D':[],'E':[],'F':[],'G':[],
    }
start=input("enter start node:")
def bfs_connected_component(graph):
   visited=[]
   queue=[start]
   while queue:
     node=queue.pop(0)
     if node not in visited:
       visited.append(node)
       neighbours=graph[node]
       for neighbour in neighbours:
         queue.append(neighbour)
   return visited
print("\nHere's the node of the graph by breadth firstsearch",bfs_connected_component(graph))
```

OUTPUT:

```
enter start node:A

Here's the node of the graph by breadth firstsearch ['A', 'B', 'C', 'D', 'E', 'F', 'G']
```