

1<sup>st</sup>

# BFS

```
graph = {
    '0' : ['1', '2'],
    '1' : ['3'],
    '2' : ['4', '5', '6'],
    '3' : ['0'],
    '4' : ['0'],
    '5' : ['0'],
    '6' : ['5'],
}
visited = []
queue = []

def bfs(v, graph, node):
    visited.append(node)
    queue.append(node)
    dis = 0;
    while queue:
        n = queue.pop(0)

        print(n, end = " ")

        for neighbour in graph[n]:
            if neighbour not in visited:
                visited.append(neighbour)
                queue.append(neighbour)

print("BFS")
bfs(visited, graph, '0')
```

2<sup>nd</sup>

```
text = input("Please Enter a sentence\n")
text_list = list(set(text)) # make unique
# text_l = list(text)
vowels = ['a', 'e', 'i', 'o', 'u']
vowel = []
consonent = []
print('Initial Vowels:', len(vowel))
for ch in text_list:
    if ch in vowels:
        vowel.append(ch)
    else:
        consonent.append(ch)
print('The number of vowels:', len(vowel))
print('The number of Consonent:', len(consonent))

print("Vowel: ", vowel)
print("Consonent: ", consonent)
```