## Problem 4:

Given an undirected graph print the order in which the nodes will be visited in a Breadth First Search. Begin from vertex 0 and at each step visit the smallest vertex first.

If the graph is on n vertices, the vertex set is from {0,..,n-1}. The input graph is given in adjacency list format. The first line of the input specifies n,the number of vertices. The second line onwards, in each line, till we see the character '#', it denotes the neighbors of the first vertex (i.e. 0). Assume that the neighbors of vertices are given in sorted format according to the vertex index. After the first '#', from the next line onwards till another '#' is seen, it denotes the neighbors of the second vertex(i.e. 1), and so on.

**Sample Input:**

```
5
2
3
4
#
#
0
3
#
0
2
#
0
#
```

**Sample Output:**

```
0 2 3 4 1
```