Problem 1:

Given an undirected graph print the order in which the nodes will be visited in a Depth 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 matrix format.The first line of the input specifies n, the number of vertices. The following n^2 entries of 0s and 1s denote the row major ordering of the adjacency matrix.

Sample Input:

```
5
0
0
1
1
0
0
0
0
0
1
1
0
0
1
0
1
0
1
0
0
0
1
0
0
0
```

Sample Output:

```
0 2 3 1 4
```