

Problem Statement

You will be given an undirected graph as input. You need to tell the number nodes in each component in ascending order.

Note: There will be no component with single node.

Input Format

- First line will contain **N**, the number of nodes and **E**, the number of edges. The value of nodes will be from **0 to 1000**.
- Next **E** lines will contain **A, B** which means there is a edge between node A and B.

Constraints

1. $1 \leq N, E \leq 1000$

Output Format

- Output the number of nodes in each component in ascending order.

Sample Input 0

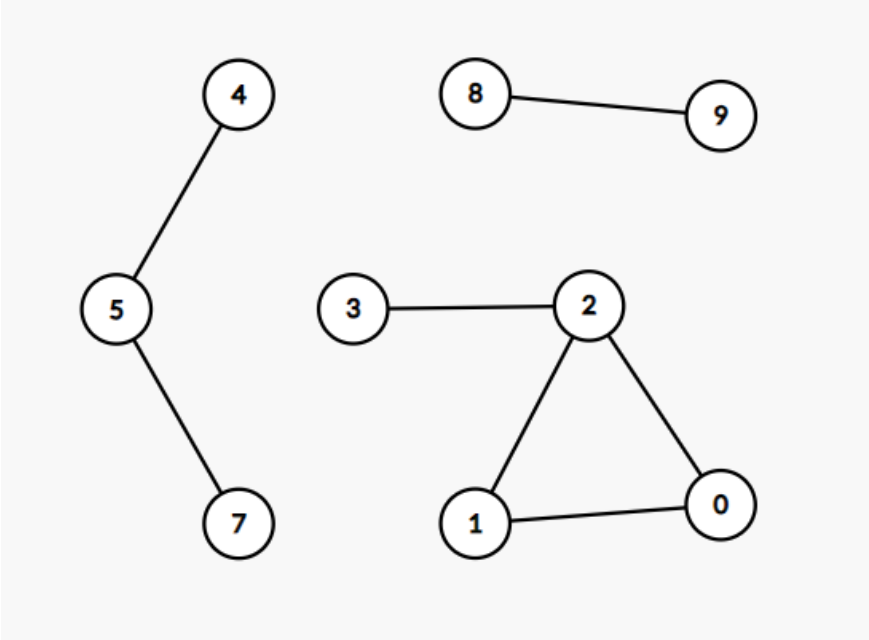
```
9 7
0 1
1 2
0 2
2 3
4 5
5 7
8 9
```

Sample Output 0

```
2 3 4
```

Explanation 0

The components are shown for the sample test case:



Sample Input 1

```
5 3
999 1000
100 500
500 600
```

Sample Output 1

```
2 3
```