# Problem
## Back Edges
### Time limit: 4 seconds

Little Cyan Fish has a connected simple undirected graph with $n$ vertices and $m$ edges. The vertices are labeled from 1 to $n$.

Little Cyan Fish wants to choose a spanning tree of this graph and root it at the vertex 1. After the tree is rooted, every vertex has an ancestor-descendant relation with some other vertices.

The following pseudocode describes how the rooted tree is obtained from the chosen spanning tree:

**Algorithm 1** Rooting the chosen spanning tree

```
1:  procedure DFS(vertex x, vertex p)
2:      Mark x as visited
3:      Set the parent of x to p
4:      for each vertex y adjacent to x in the chosen spanning tree do
5:          if y ≠ p then
6:              DFS(y, x)
7:          end if
8:      end for
9:      Finish vertex x
10: end procedure
11: procedure ROOT-TREE
12:     Mark all vertices as unvisited
13:     DFS(1, 0)
14: end procedure
```

For two vertices $u$ and $v$, vertex $u$ is an ancestor of vertex $v$ if $u$ appears on the path from the root 1 to $v$ in the chosen spanning tree. A vertex is also considered an ancestor of itself.

An edge of the original graph that is not included in the spanning tree is called a *back edge* if one of its endpoints is an ancestor of the other endpoint in the rooted spanning tree.

Little Cyan Fish wants the number of back edges to be exactly $c$. Construct such a spanning tree.

## Input

There are multiple test cases. The first line of the input contains a single integer $T$ ($1 \leq T$), indicating the number of test cases.

For each test case, the first line of the input contains three integers $n$, $m$, $c$ ($1 \leq n \leq 10^6$, $n-1 \leq m \leq \frac{n(n-1)}{2}$, $0 \leq c \leq m-n+1$). Each of the next $m$ lines contains two integers $u$ and $v$ ($1 \leq u, v \leq n$, $u \neq v$), denoting an undirected edge between vertices $u$ and $v$. The $i$-th edge in the input has index $i$. The graph in each test case is simple and connected, and it is guaranteed that at least one valid spanning tree exists.

It is guaranteed that the sum of $n$ over all test cases does not exceed $10^6$ and the sum of $m$ over all test cases does not exceed $2 \times 10^6$.

## Output

For each test case, output $n-1$ distinct integers on one line: the indices of the edges chosen into the spanning tree.

The selected edges must form a spanning tree rooted at vertex 1 whose number of back edges is exactly $c$.

If there are multiple valid answers, print any of them.

**Sample Input 1**

```
2
5 10 0
4 1
3 4
2 1
5 3
3 2
1 5
4 2
3 1
2 5
4 5
5 10 3
1 4
3 4
2 4
5 1
2 3
3 5
1 2
2 5
1 3
4 5
```

**Sample Output 1**

```
1 3 6 8
1 2 3 10
```