Degree

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	512 megabytes

3 is a mysterious number with a lot of anecdotes. It means the empress in TAROT. Pythagoras used it to describe the male. And Gabe can't count to 3.

So there's an interesting challenge about 3 for you. There are a lot of teams now participating in CCPC. However, the huge number of teams makes it hard to connect all computers to the local network considering the difficulty in arranging network cables. To find a solution, you decide to pick up some of the computers and wish to get some spark in a simplified situation. The connection of computers can be regarded as an undirected graph. To keep the topology of the network graph unchanged, you decide to choose some computers and their degrees modulo 3 won't change in your newly chosen connection plan. Nobody knows why you choose the number 3 but we all know 3 is mysterious. What's more, you must hurry up now. If you can't finish it in time, you will get how-to-comment in Zhihu of course.

Formally, you are given a simple undirected graph with n vertices and m edges. Now you need to pick up some of the vertices(at least one and not n) to build a new graph(induced subgraph). Each vertex's degree in the new graph must have the same remainder divided by three as it's in the original graph.

In the mathematical field of graph theory, an induced subgraph of a graph is another graph, formed from a subset of the vertices of the graph and all of the edges (from the original graph) connecting pairs of vertices in that subset.

Input

The first line contains two integers $n, m (1 \le n \le 5 \times 10^5, 0 \le m \le 10^6)$.

The next m lines, each line contains two integers $x, y (1 \le x, y \le n, x \ne y)$ denoting an edge between x and y.

Output

If there's no plan, output **No**;

otherwise, output **Yes**,

then output a single integer k $(1 \le k \le n-1)$ in the second line meaning the number of vertices in the new graph, and the third line contains k integers indicating the index of vertices in the new graph.

Note that:

1. You mustn't pick up the whole graph.
2. You must guarantee the vertices are different in the output.
3. If there are multiple answers, print any of them. And you can print the vertices in any order.

Examples

standard input	standard output
3 3 1 2 2 3 3 1	No
6 6 1 2 2 3 3 1 4 5 5 6 6 4	Yes 3 1 2 3
6 9 1 2 2 3 3 4 4 1 1 5 1 6 1 3 3 5 3 6	Yes 3 3 2 1