

# Earthquakes II

Time Limit: 1 Second  
Memory Limit: 256 MB

As the governor of the state of Sionilli, LetianPie is getting worried recently because there have been too many earthquakes happening in the state. Unfortunately, the earthquakes only happen in cities and cause a lot of damage to residents. Moreover, an earthquake could make it impossible to travel from one city to another because travelers need to go through the damaged city. LetianPie wants to find out all cities such that an earthquake happening in the city would cause the state to become disconnected. Since he is very busy, he asks you to write a program to compute the result for him.

The state of Sionilli can be viewed as an undirected graph with  $n$  ( $1 \leq n \leq 10^6$ ) vertices and  $m$  ( $n - 1 \leq m \leq \min(10^6, \frac{n(n-1)}{2})$ ) edges. It is guaranteed that the graph is connected and there are no self-loops or multiple edges in the graph.

## Input

The first line of input contains two integers  $n$  and  $m$  ( $1 \leq n \leq 10^5$ ,  $n - 1 \leq m \leq \min(10^5, \frac{n(n-1)}{2})$ ) - the number of vertices, edges, and earthquakes.

Following  $m$  lines describe the roads. The  $i$ -th line contains two integers  $u_i$  and  $v_i$  ( $1 \leq u_i, v_i \leq n$ ), denoting there is an undirected edge between  $u_i$  and  $v_i$ . It is guaranteed that the graph is connected and there are no self-loops or multiple edges in the graph.

## Output

In the first line, output a single integer denoting the number of cities such that an earthquake happening in the city would cause the state to become disconnected.

In the second line, output the indices of all such cities in increasing order.

## Sample Inputs

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5 6  
1 2  
1 3  
1 4  
1 5  
2 4  
3 5

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## Sample Outputs

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1  
1

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