Max And Min Tasks Before Kth

You are given dependency between some tasks, you need to find out 2 things about a certain task K:

1. The minimum number of tasks(min) to be done before you can start that particular task.
2. The maximum number of tasks(max) that can be done without starting that task.

Input Format

First line contains 3 integers N,D,K - Number of tasks, Number of dependencies and the task you need to find about.

Next D lines contain 2 integers T1, T2 - implying that T1 has to be completed before T2.

Constraints

1 <= N <= 500

D <= min(N*(N-1)/2, 100000)

1 <= K <= N

Output Format

Print 2 space separated integers min, max.

Sample Input 0

```
5 4 3
1 2
1 3
2 4
3 5
```

Sample Output 0

```
1 3
```

Explanation 0

We have to complete task 1 atleast to be able to start task 3 so 1 is the answer for minimum, and for maximum we can do 3 tasks i.e. 1,2,4 before starting task 3.