

## Problem Statement

You are given a list of  $N$  people who are attending ACM-ICPC World Finals. Each of them are either well versed in a topic or they are not. Find out the maximum number of topics a 2-person team can know. And also find out how many teams can know that maximum number of topics.

**Note** Suppose  $a$ ,  $b$  and  $c$  are 3 different people then  $(a,b)$  and  $(b,c)$  are counted as two different teams.

## Input Format

The first line contains two integers  $N$  and  $M$  separated by a single space, where  $N$  represents the number of people, and  $M$  represents the number of topics.  $N$  lines follow.

Each line contains a binary string of length  $M$ . If the  $i_{th}$  line's  $j_{th}$  character is 1, then the  $i_{th}$  person knows the  $j_{th}$  topic and doesn't know the topic otherwise.

## Output Format

On the first line, print the maximum number of topics a 2-person team can know.

On the second line, print the number of 2-person teams that can know the maximum number of topics.

## Constraints

$$2 \leq N \leq 500$$

$$1 \leq M \leq 500$$

## Sample Input

```
4 5
10101
11100
11010
00101
```

## Sample Output

```
5
2
```

## Explanation

(1, 3) and (3, 4) know all the 5 topics. So the maximal topics a 2-person team knows is 5, and only 2 teams can achieve this.