ACM ICPC Team

by dheeraj

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 three 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; otherwise, he doesn't know the topic.

Constraints
$2 \leq N \leq 500$
$1 \leq M \leq 500$

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.

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.

Submissions:32831

Max Score:25
Difficulty: Easy

Rate This Challenge:

Need Help?

Finding Max Min

Bitwise OR

More

Current Buffer (saved locally, editable)

Java 7

```
1  import java.io.*;
2  import java.util.*;
3  import java.text.*;
4  import java.math.*;
5  import java.util.regex.*;
6
7  public class Solution {
8
9      public static void main(String[] args) {
10         Scanner in = new Scanner(System.in);
11         int n = in.nextInt();
12         int m = in.nextInt();
13         String topic[] = new String[n];
14         for(int topic_i=0; topic_i < n; topic_i++){
15             topic[topic_i] = in.next();
16         }
17     }
18 }
19
```

Line: 1 Col: 1

Upload Code as File

Test against custom input

Run Code

Submit Code