



Problem L Worm Squares

Time limit: 3 seconds

Memory limit: 512 megabytes

Problem Description

Worms, worms, worms everywhere! So many worms have occupied the square it is hard to tell them apart. Every worm is made up of three parts. A head, a body and a tail. A worm can be bended in all sort of ways, as long as the parts are next to each other, they may belong to the same worm. Please look at the square and tell us at most how many worms can there be.

Input Format

On the first line there is a single integer T ($T \leq 20$) indicating the number of test cases. The first line of each test case contains two integers n and m ($0 < n, m \leq 50$ and $nm \leq 100$) indicating the size of the square. The following n lines each containing m characters that are either H (Head), B (Body) or T (Tail).

Output Format

For each test case, output the maximum number of worms that may exist. There should be a line break at the end of the output of each test case.

Sample Input

```
2
1 4
BHBT
2 3
BHH
TTB
```

Sample Output

```
1
2
```