2 Questions   **Total Marks: 200.0**

2 Programming Questions

1. Policemen and thieves   + 100.0

2. Missing Number   + 100.0

Question 1   Max. Marks 100.00   ❓

Policemen and thieves

You are given a grid of size $N \times N$ that has the following specifications:

- Each cell in the grid contains either a policeman or a thief.
- A policeman can only catch a thief if both of them are in the same row.
- Each policeman can only catch one thief.
- A policeman cannot catch a thief who is more than K units away from the policeman.

Write a program to find the maximum number of thieves that can be caught in the grid.

Input format

- First line: T (number of test cases) For each test case
- First line: Two space-separated integers N and K
- Next N lines: N space-separated characters (denoting each cell in the grid)

Output format

For each test case, print the maximum number of thieves that can be caught in the grid.

Constraints

$1 \leq T \leq 10$
$1 \leq N \leq 1000$