# The turtle

Cost: 10 | Solved: 91

**Memory limit: 256** MBs

**Time limit:** 1 s

**Input**: input.txt

**Output:** output.txt

**Task:**

There is a turtle in the upper-left corner of a glade of **n** rows and **m** columns and a certain amount of acid on each chunk of the glade. The turtle can move only down or to the right and its movement stops at the lower-right corner. Every 1 ml. of acid deals 1 damage to the turtle.

You have to find the minimal amount of damage that the turtle will take after a walk on the glade.

*Here's an example which shows the turtle's way. The minimal damage taken here is 7.*
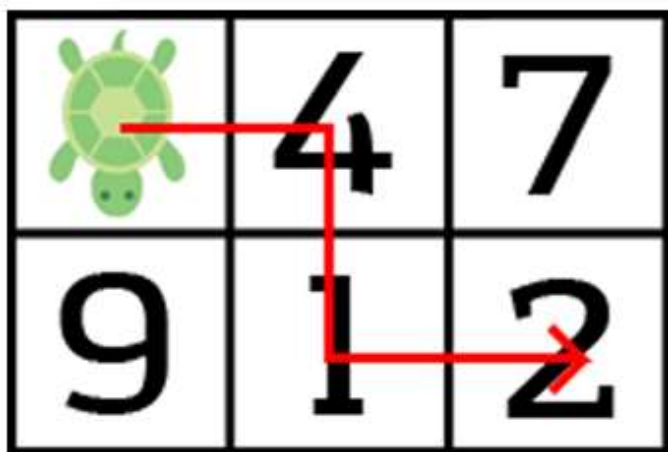


**Input:**

The first line contains two naturals **n** and **m** ($1 \leq n,m \leq 10^3$) – the quantity of rows and columns of the glade.

The next **n** lines contain **m** numbers – the amount of ml. of acid on each chunk of the glade.

**Output:**

The least possible damage taken.

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**Example:**

| Input | Output |
|---|---|
| 3 4<br><br>5 9 4 3<br><br>3 1 6 9<br><br>8 6 8 12 | 35 |
| 1 1<br><br>1 | 1 |