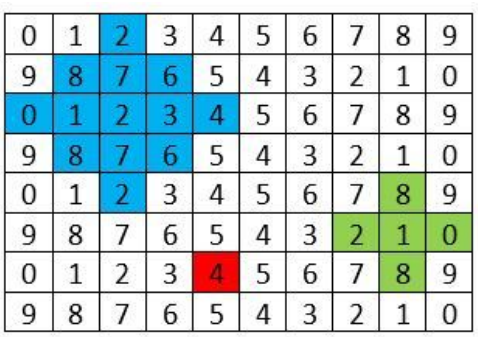
Fun Fishing

locked

Problem Submissions

Time Limit: $C/C++$ $(2s)$, $Java$ $(3s)$
Memory Limit: $512MB$



There is an N x M grid representing a pond. Each cell of the pond may contain some fish. The amount of fish in each cell is represented by the number written in the cell.

At first, you need a fishing net to catch fish in the pond. A fishing net is a square in shape. The size of the net is equivalent to the length of the square's side.

Secondly, when you throw the fishing net in the pond, you have to throw it diagonally. The diagonals of the square should be parallel to the *Horizontal* and *Vertical* axis. Also, you need to throw the net in a way that **no portion of it goes outside** the pond area. The above picture shows three different-sized (1: Red, 2: Green, 3: Blue) fishing nets thrown in the pond.

After you determine the size of the fishing net, your next task is to determine where in the pond you should throw it. You have only one chance to throw it, so try to catch the maximum fish possible.

If you are free to choose any size of fishing net, by following all the rules above, what is the maximum amount of fish you can catch by throwing it once?

Input Format

Input starts with two integers N and M, denoting the size of the pond.

Each of the next N lines contains M space-separated integers.

The j_{th} number of the i_{th} line F_{ij} denotes the amount of fish in that cell.

Constraints

$1 \leq N, M \leq 3 * 10^6$

$N * M \leq 3 * 10^6$

$0 \leq F_{ij} \leq 10^9$

Output Format

Print the maximum amount of fish you can catch.

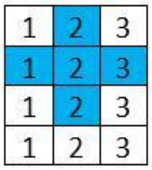
Sample Input 0

```
4 3
1 2 3
1 2 3
1 2 3
1 2 3
```

Sample Output 0

```
10
```

Explanation 0



Submissions: 38
Max Score: 1

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C

```c
#include <stdio.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>

int main() {

    /* Enter your code here. Read input from STDIN. Print output to STDOUT */
    return 0;
}

```

Line: 1 Col: 1

Upload Code as File Test against custom input Run Code Submit Code