**CMPUT 274 - Tangible Computing**
**Morning Problem: Scare Factor**

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## Description

Alice loves movies and there's a movie night coming up at her local theatre. The issue is the theme of the night is "scare fest", and Alice can only handle so many scary movies.

The local theatre has $n$ auditoriums allowing for different movies to be played at the same time, each auditorium will play $m$ movies throughout the night. Every movie will share the same runtime allowing attendees to hop between auditoriums once a movie has completed. All movies have a scare factor $s$, and Alice can only handle up to a cumulative scare factor of $k$.

Alice was hoping she could still atend the entire night and that's where you come in. Can you determine the maximum amount of movies she can watch without getting too scared?

## Input

The first line of input contains 3 space seperated integers $n$ ($1 \leq n \leq 1,000$), the amount of auditoriums at the local theatre, $m$ ($1 \leq m \leq 1,000$) , the amount of movies playing throughout the night, and $k$ ($0 \leq k \leq 100,000$), the maximum cumulative scare factor Alice can handle.

Next will follow $n$ lines of input each containing $m$ space seperated integers $s_i$ ($0 \leq s_i \leq 100,000$) , indicating the scare factor of the $i$-th movie that will be played in the $n$-th auditorium.

## Output

Output a single line containing the maximum amount of movies Alice can watch without getting too scared.

## Sample Input 1

```
3 5 20
0 1 7 17 25
3 2 10 11 1
1 4 6 5 13
```

## Sample Output 1

```
5
```

## Explanation

One possible set of movies alice could watch would be viewing in auditoriums 1, 2, 3, 3, 2, allowing her to view five movies while only reaching a scare factor of 14.

## Sample Input 2

```
3 3 15
20 15 10
15 10 5
10 5 1
```

### Sample Output 2

```
2
```

### Explanation

Alice could potentially watch the movies in auditoriums 3, 0, 3, where 0 indicates skipping a movie. Other possible selections could be 3, 3, 0 or even 3, 0, 2, none of these allow her to view 3 movies.

### Sample Input 3

```
4 5 15
14 15 13 10 20
2 18 16 17 25
31 27 21 26 25
11 3 42 34 18
```

### Sample Output 3

```
3
```

### Explanation

Alice could watch the movies in auditoriums 2, 4, 0, 1, 0.