

Flip Columns

A binary matrix of $n \times m$ was given, you have to toggle any column k number of times so that you can get the maximum number of rows having all 1's.

for eg, $n=3, m=3,$

```
1 0 0
1 0 1
1 0 0
```

if $k=2$, then we will toggle column 2 and 3 once and we will get rows 1 and 3 with 1 1 1 and 1 1 1 i.e. all 1's so answer is 2 as there are 2 rows with all 1's.

if $k=3$, then we will toggle column 2 thrice and we will get row 2 with 1 1 1 i.e. all 1's so answer is 1 as there is 1 row with all 1's.

Input Format

n,m,k space separated n lines each containing m numbers(1/0)

Constraints

$$1 < n,m < 15, 1 < k < 7$$

Output Format

Maximum rows

Sample Input 0

```
3 3 2
1 0 0
1 0 1
1 0 0
```

Sample Output 0

```
2
```

Explanation 0

if $k=2$, then we will toggle column 2 and 3 once and we will get rows 1 and 3 with 1 1 1 and 1 1 1 i.e. all 1's so answer is 2 as there are 2 rows with all 1's.