Problem A
Funny Decoder

Input file: *pa.in*
Time limit: 1 second

🎯 R=7, C=5 時每條對角線座標演示

sum	parity	起點 (r,c)	座標走訪順序
0	even	r=min(0,6)=0, c=0	(0,0)
1	odd	c=min(1,4)=1, r=0	(0,1) → (1,0)
2	even	r=min(2,6)=2, c=0	(2,0) → (1,1) → (0,2)
3	odd	c=min(3,4)=3, r=0	(0,3) → (1,2) → (2,1) → (3,0)
4	even	r=min(4,6)=4, c=0	(4,0) → (3,1) → (2,2) → (1,3) → (0,4)
5	odd	c=min(5,4)=4, r=1	(1,4) → (2,3) → (3,2) → (4,1) → (5,0)
6	even	r=min(6,6)=6, c=0	(6,0) → (5,1) → (4,2) → (3,3) → (2,4)
7	odd	c=min(7,4)=4, r=3	(3,4) → (4,3) → (5,2) → (6,1)
8	even	r=min(8,6)=6, c=2	(6,2) → (5,3) → (4,4)
9	odd	c=min(9,4)=4, r=5	(5,4) → (6,3)
10	even	r=min(10,6)=6, c=4	(6,4)

Problem Description

Wang and Chen have designed a funny rule of encrypting messages. An example of encrypting scheme is shown as follows. If the original message is "Actions speak louder than words.", Chen would write down as a 2D array (as shown in Figure 1, seven rows and five columns). Chen used the symbol "*" to pad the message out to make a rectangle.

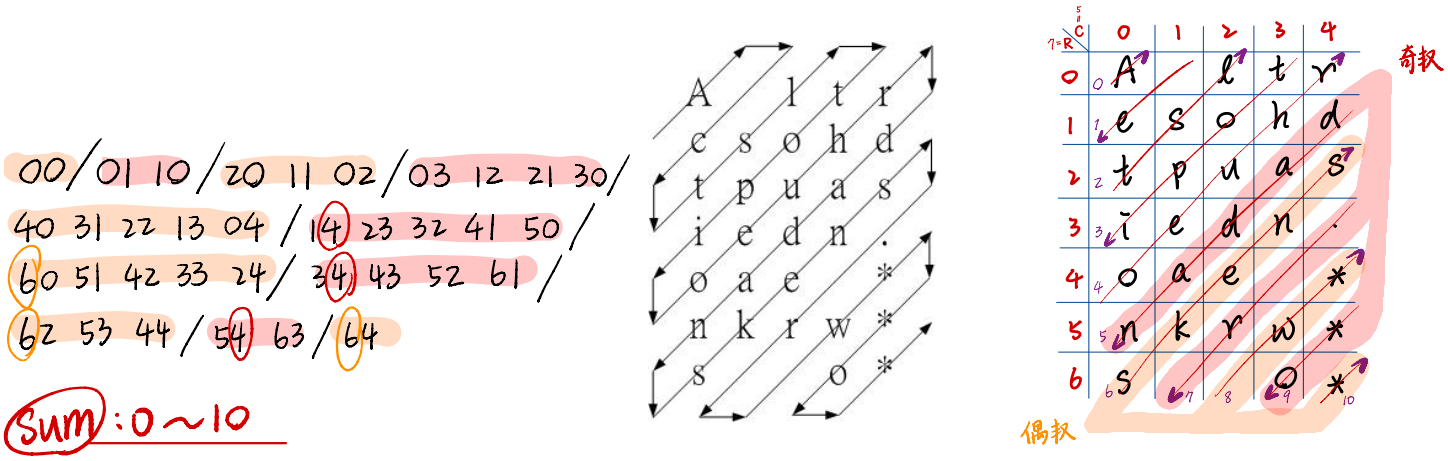

Figure 1: A zigzag scan on the 2D array.

Then, a zigzag scan would be processed on the 2D array as shown in previous figure. Therefore, the original message would be encrypted as

A ctsltopioeuhrdadanskens. r w**o*

Please write a program, which can help Wang to find the original message from the encrypted code.

Technical Specification

1. The length of each encrypted code must be equal to the value of row*column. Please check it and the limit of row*column is smaller than and equal to 1000.

2. If decoded completely, the symbol "*" can not be contained in output message.

Input Format

Input will consist of multiple input sets. Each set will consist of two lines. The first will contain two numbers: row and column. The second line is the encrypted code which length equal to the value of row*column. When the input line consists of only one symbol "#", it means that this is the end of input file.

Output Format

For each input set, find its correct message, and show in the output file "pa.out". If the length of encrypted code is not equal to row*column, please show a message "<encrypted length error>" for this input set, and continue to deal with other input sets.

Sample Input

```
10 5
Anlld km  wna oyakoor e .*dspk l u**lJaayal** cb**
5 6
Kenodiwsgwle erp o.*
7 5
A ctsltopioeuhrdadanskens. r  w**o*
#
```

Sample Output

All work and no play makes Jack a dull boy.
<encrypted length error>
Actions speak louder than words.