

Star pyramid

Enter any positive integer that describes the height of star pyramid. Print out the star pyramid.

Example

The star pyramid that has 5 rows is:

```
  *
 * * *
* * * * *
* * * * * *
* * * * * * * *
```

Input

Contain the height of star pyramid.

Constraints

- $0 < n \leq 100$

Output

Print out the star pyramid.

Example

Input 1:

5

Output 1:

```
  *
 * * *
* * * * *
* * * * * *
* * * * * * * *
```

Input 2:

2

Output 2:

```
  *
 * * *
```