

1. Generate the following patterns

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

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

2.

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

3. Create a function that generates the following pattern when the given N values are as follows

N = 2

```
# #
```

```
# #
```

N = 3

```
## ## ##
```

```
## ## ##
```

N = 4

```
#### #### #### ####
```

```
#### #### #### ####
```

4. Create a function that generates the following pattern when the given h values are as follows

a) H = 3

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

b) H = 3

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

c) H = 3 (assume always odd number is given)

```
##  ##  ##
  ##  ##
##  ##  ##
  ##  ##
##  ##  ##
```

5.

a

A -> 1

B -> 2

C -> 3

...

Z -> 26

AA -> 27

AB -> 28

...

Input: columnNumber = 28

Output: "AB"

b

Example :

Input: col = "AB"

Output: 28

6.

Given an integer array, move all 0's to the end

maintaining the order of the other elements.

Example 1:

Input: nums = [0,1,0,3,12]

Output: [1,3,12,0,0]

7.

Given a Roman number, change to its corresponding integer value

Symbol	Value
--------	-------

I	1
---	---

V	5
---	---

X	10
---	----

L	50
---	----

C	100
---	-----

D	500
---	-----

M	1000
---	------

Example :

Input: s = "LVIII"

Output: 58

Explanation: L = 50, V= 5, III = 3.