PATTERN PRINTING

PRINT 1 TO N

Given n (number of rows), print the following pattern:

n = 5

1
2
3
4
5

```
for(int i=1; i<=n ;i++)
{
    cout << i <<endl;
}
```

n = 6

1
2
3
4
5
6

n = 7

1
2
3
4
5
6
7

2 STARS

Given n (number of rows), print the following pattern:

n = 5

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

```
for(int i=1; i<=n ;i++)
{
    cout << "**" << endl;
}
```

n = 6

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

n = 7

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

4 STARS

Given n (number of rows), print the following pattern:

n = 5

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

n = 6

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

n = 7

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

M STARS (RECTANGLE)

Given n (no. of rows) and m (no. of cols) , print the following pattern:

n = 5, m = 7

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

n = 6, m = 3

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

n = 7, m = 4

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

SQUARE

Given n (no. of rows and cols), print the following pattern:

n = 5

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

n = 6

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

n = 7

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

PYRAMID

Given n (no. of rows), print the following pattern:

n = 5

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

n = 6

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

n = 7

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

INVERTED PYRAMID

Given n (no. of rows), print the following pattern:

n = 5

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

n = 6

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

n = 7

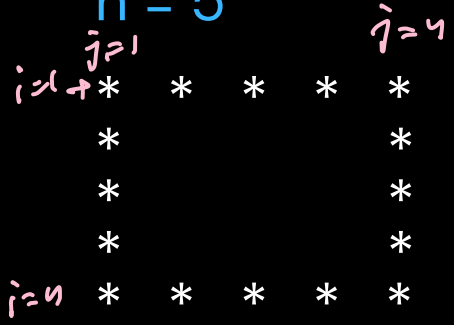
```
*******
******
*****
****
***
**
*
```

HOLLOW SQUARE

Boundary will exist

Given n (no. of rows and cols), print the following pattern:

n = 5




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

n = 6

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

HOLLOW RECTANGLE

Given n (no. of rows) and m (no. of cols) , print the following pattern:

n = 5, m = 7

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

n = 6, m = 8

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

n = 7, m = 4

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

NUMBERED RECTANGLE

Given n (no. of rows) and m (no. of cols) , print the following pattern:

n = 5, m = 7

```
1111111
2222222
3333333
4444444
5555555
```

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

1) Draw the star pattern
2) Replace * → given elem

n = 6, m = 3

```
111
222
333
444
555
666
```

n = 7, m = 4

```
1 1 1 1
2 2 2 2
3 3 3 3
4 4 4 4
5 5 5 5
6 6 6 6
7 7 7 7
```

NUMBERED RECTANGLE - II

Given n (no. of rows) and m (no. of cols) , print the following pattern:

n = 5, m = 7

```
1234567
1234567
1234567
1234567
1234567
```

n = 6, m = 3

```
123
123
123
123
123
123
```

n = 7, m = 4

```
1 2 3 4
1 2 3 4
1 2 3 4
1 2 3 4
1 2 3 4
1 2 3 4
1 2 3 4
```

NUMBERED RECTANGLE - III

Given n (no. of rows) and m (no. of cols) , print the following pattern:

n = 5, m = 7

```
A B C D E F G
A B C D E F G
A B C D E F G
A B C D E F G
A B C D E F G
```

n = 6, m = 3

```
A B C
A B C
A B C
A B C
A B C
A B C
```

n = 7, m = 4

```
A B C D
A B C D
A B C D
A B C D
A B C D
A B C D
A B C D
```

NUMBERED RECTANGLE - IV

Given n (no. of rows) and m (no. of cols) , print the following pattern:

n = 5, m = 7

```
AAAAAAA
BBBBBBB
CCCCCCC
DDDDDDD
EEEEEEE
```

n = 6, m = 3

```
AAA
BBB
CCC
DDD
EEE
FFF
```

n = 7, m = 4

```
AAAA
BBBB
CCCC
DDDD
EEEE
FFFF
GGGG
```

NUMBERED PYRAMID

Given n (no. of rows), print the following pattern:

n = 5

```
1
22
333
4444
55555
```

n = 6

```
1
22
333
4444
55555
666666
```

n = 7

```
1
22
333
4444
55555
666666
7777777
```

BINARY PYRAMID

Given n (no. of rows), print the following pattern:

n = 5

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

n = 6

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

n = 7

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