→ Hallow Pattern Printing :

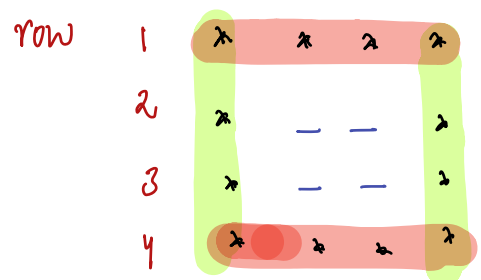
→ functions

N=1 :

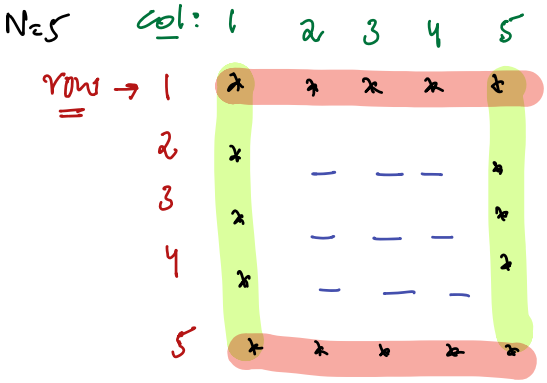
N=2 :

N=3

N=4



N=5




```
// given - N
   |-> # Rows -> N
   |-> # Columns -> N

if ( row == 1 || row == N || col == 1 || col == N) {
    print("*")
}
else {
    print(" ")
}
```

```
if (row == 1 || row == 5 || col == 1 || col == 5)
    print(*)
else
    print(_)
```

// Patterns: { Hollow Pattern Printing }

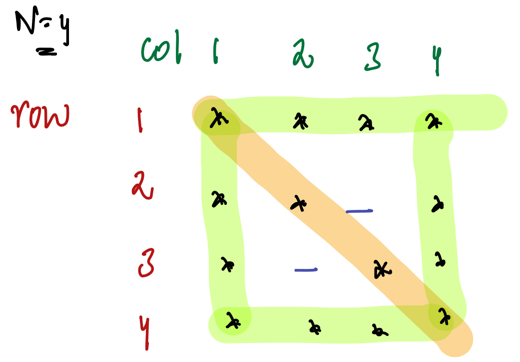
→ { Analyze: In which rows and in which columns we are printing }

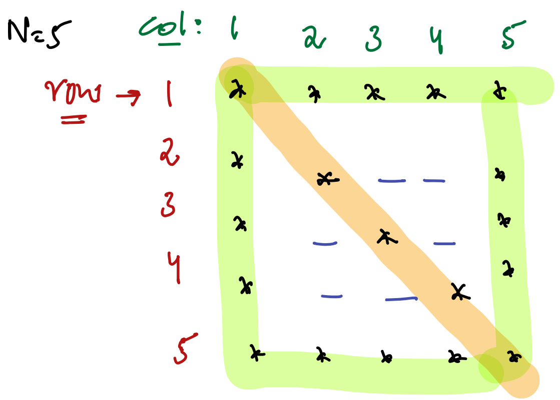
// given N?

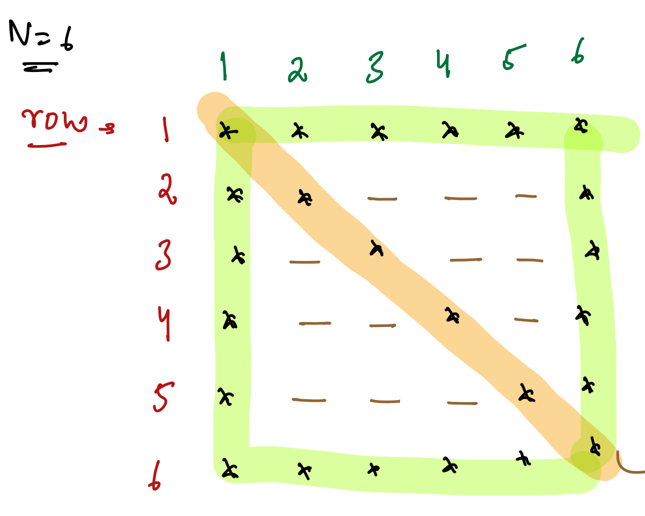
- ↳ N rows
- ↳ N Columns
- ↳ Conditions:

i==1 || j==1 || i==N || j==N || i==j

- i==1 || j==1 || i==N || j==N → boundary
- i==j → diagonal {L-R}



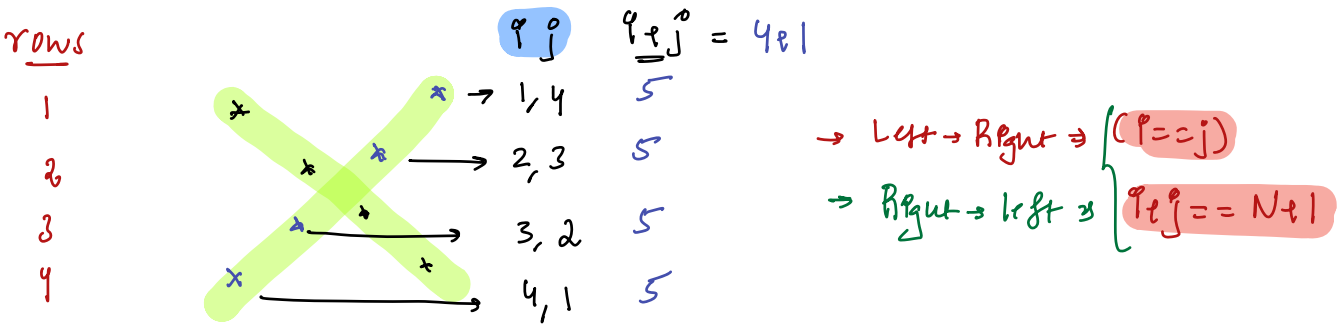




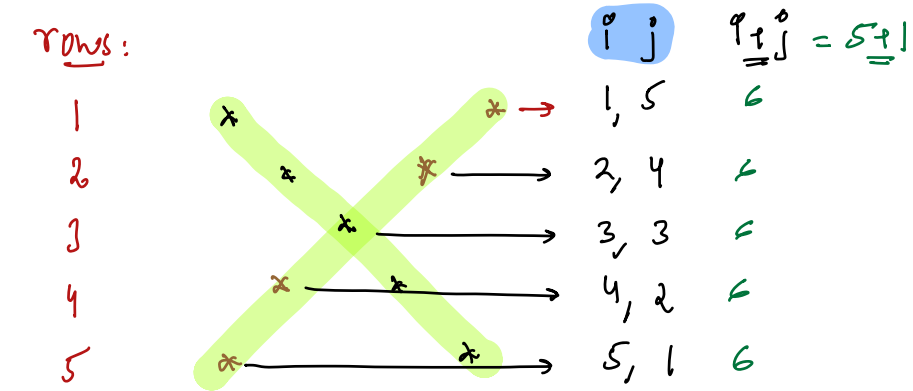
→ row number & col number is same

// Pattern-17 :

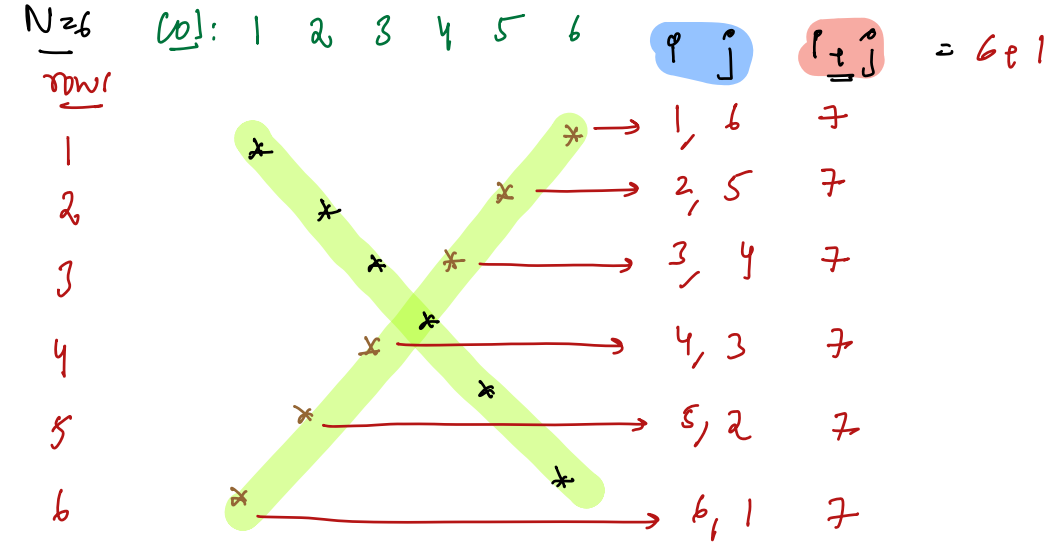
N=4 : cols : 1 2 3 4



N=5 : col : 1 2 3 4 5



N=6 col : 1 2 3 4 5 6



→ **Functions:** → {Don't keep answers in Public Chat}

↳ 9th / 10th / 11 / 12

Input → Output

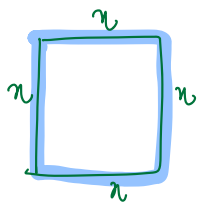
$f(n) = n^2 + 2n$ → $n = 4$ → 24

$sqr(n) = n^2$ → $n = 5$ → 25

$root(n) = \sqrt{n}$ → $n = 49$ → 7

$area(r) = \pi r^2$

$psq(n) = 4n$



$f(n, y) = n^2 + 2y$

$n = 3$ $y = 4$

$f(3, 4) = 3^2 + (2)(4)$ → 17

$f(5, 4) = 5^2 + (2)(4)$ → 33

$sum(n, y) = n + y$:

Input		Output
n	y	
10	20	30

// function name

perform operation

Input → (optional)

→ output (optional)

→ After break:

10:18 pm → 10:28 pm

Functions :

// Syntax :