

	1	2	3	4	5
1	11	12	13	14	15
2	21	22	23	24	25
3	31	32	33	34	35
4	41	42	43	44	45
5	51	52	53	54	55

if ($i \leq n$)

$\begin{matrix} * & * & * & * & * \\ * & * & * & * & * \\ * & * & * & * & * \\ * & * & * & * & * \\ * & * & * & * & * \end{matrix}$

if ($j = n+1$)

$\begin{matrix} * & * & * & * & * \\ * & * & * & * & * \\ * & * & * & * & * \\ * & * & * & * & * \\ * & * & * & * & * \end{matrix}$

else

$\begin{matrix} 1 & & & & \\ 2 & 3 & & & \\ 4 & 5 & 6 & & \\ 7 & 8 & 9 & 10 & \end{matrix}$

if ($col \geq row$)
else

if ($row = col$)
or if ("*")

$\begin{matrix} * & * & * & * & * \\ * & * & * & * & * \\ * & * & * & * & * \\ * & * & * & * & * \\ * & * & * & * & * \end{matrix}$

1 2
1 2 3
1 2 3 4
1 2 3 4 5

1 2 3 4 5
2 3 4 5 6
3 4 5 6 7
4 5 6 7 8
5 6 7 8 9

$\boxed{2 \times n - 1} \rightarrow 4$

1 - 3

for (int i = 1; i <= n - 1; i++)

$\left\{ \begin{array}{l} // \text{print spaces before first star} \\ \text{for (int } j = 1; j < n; j++) \\ \quad \text{printf(" ")} \\ \text{for (int } j = 1; j <= 2(i-1) \end{array} \right.$

$m = \frac{n(n+1)}{2}$

```
int min(int arr, int start, int end)
{
    int min = INT_MAX;
    for (int i = start; i < end; i++)
    {
        if (arr[i] < min)
            min = arr[i];
    }
    return min;
}
```

① $(n-1) + (n-2) + (n-3) + \dots + 2 + 1$

$$\begin{aligned} 1 &\longrightarrow n \Rightarrow \frac{n(n+1)}{2} \\ &= \frac{(n-1)(n+1)}{2} \\ &= \frac{n^2 - 1}{2} \\ &= \frac{n(n-1)}{2} \end{aligned}$$

Select $\frac{n(n+1)}{2} \Rightarrow O(n^2)$

$\begin{matrix} m \times n & m \times n \\ p \times j & \end{matrix}$

$\begin{matrix} m \times n & m \times n \\ m \times j & m \times n \\ m \times n & m \times n \end{matrix}$

$c[m][n]$
 $\begin{cases} \text{for (int } i=0; i < n; i++) \\ \quad \text{for (int } j=0; j < m; j++) \\ \quad \quad \{ c[i][j] = m[i][j] * n[j][i] \} \end{cases}$

① $\begin{matrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 \end{matrix}$

② $\begin{matrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 \end{matrix}$

③ $\begin{matrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 \end{matrix}$

④ $\begin{matrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 \end{matrix}$