

$2 \rightarrow O(n)$
 $3 \rightarrow O(n^2)$
 $4 \rightarrow O(n^3)$

$O(n^3)$

\downarrow

$O(n^3)$

```
void swap(int* a, int* b)
{
    int temp;
    temp = *a;
    *a = *b;
    *b = temp;
}

// swap using xor
void swap_xor(int* a, int* b)
{
    *a = *a ^ *b;
    *b = *a ^ *b;
    *a = *a ^ *b;
}

// swap using temp
void swap_temp(int* a, int* b)
{
    int temp = *a;
    *a = *b;
    *b = temp;
}

// swap using array
void swap_array(int* a, int* b)
{
    int arr[2];
    arr[0] = *a;
    arr[1] = *b;
    *a = arr[1];
    *b = arr[0];
}

// swap using pointer
void swap_ptr(int* a, int* b)
{
    int* temp = a;
    a = b;
    b = temp;
}

// swap using array and pointer
void swap_ptr_array(int* a, int* b)
{
    int arr[2];
    arr[0] = *a;
    arr[1] = *b;
    *a = arr[1];
    *b = arr[0];
}

// swap using pointer and array
void swap_ptr_ptr(int* a, int* b)
{
    int* temp = a;
    a = b;
    b = temp;
}
```

$$\begin{array}{ccccccc} -2 & -1 & -1 & 0 & 0 & 1 & 2 \\ j & j & l & & & & n \end{array} \quad t_{\text{tot}} = 0$$
$$a+b+c+d = \text{for}$$
$$c+d = 101 - (a+b)$$

10

100

$$\begin{bmatrix} 10 & 5 & 2 & 5' \\ & 1 & & 1' \end{bmatrix}$$

(10)

$$\begin{pmatrix} 10, 5 \\ 5 \end{pmatrix}$$

$[5, 2]$
 $[29]$

$$\begin{array}{cc} [10] & [5, 2, 5] \\ [10, 5] & [2, 5] \\ [5] & [5] \\ [5, 2] & \\ [2] & \end{array}$$

0 1 2 3 2 1 0 1 2 3 4 3

0 1 2 3 4 5 6 7 8 9 10 \times
j

$$ans = 6 \cdot (j - j + 1)$$

No. of zero in my word = 2

- ① introduce new person to window
- ② If after introducing new person window becomes invalid, start sharing until window becomes valid
- ③ Now, window will definitely be valid, compare with ans

0 0 0 0 1 2

- ① concerned with data life / end;
- ② treat the joint as unexplained points;

 $O(2^n)$

Handwritten diagram of a number line from 0 to 10. The line is labeled with 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. A red bracket is drawn under the segment from 1 to 2, and a red arrow points to the number 1.

$$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 0 \\ \hline & & & & & & 1 \\ \hline & & & & & & 5 \end{bmatrix}$$

Judge Algo
Constraints

500

100

$n-1$ $(10^3) \rightarrow O(n)$
 $n \leq 12$
 n_1
 $O(n^2)$

→ $O(n^2)$ → $O(n)$
→ $O(\log n)$