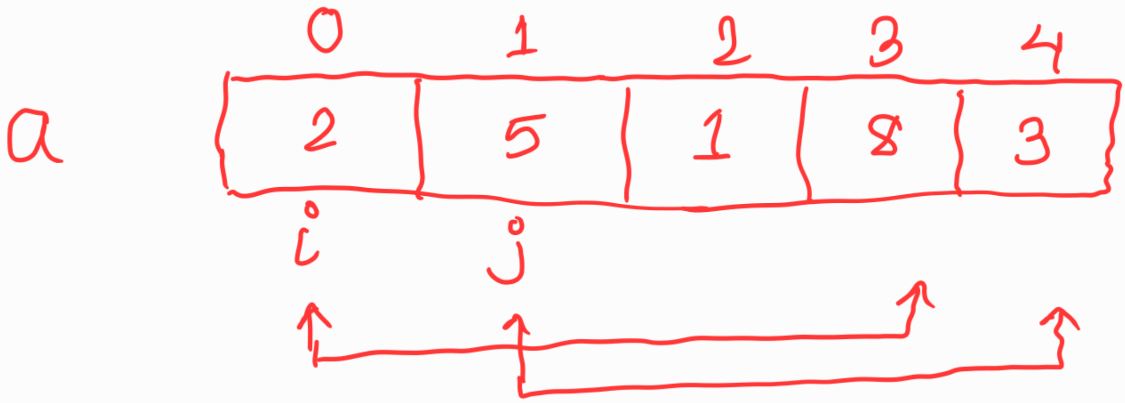
(#) Sorting the elements in an array.

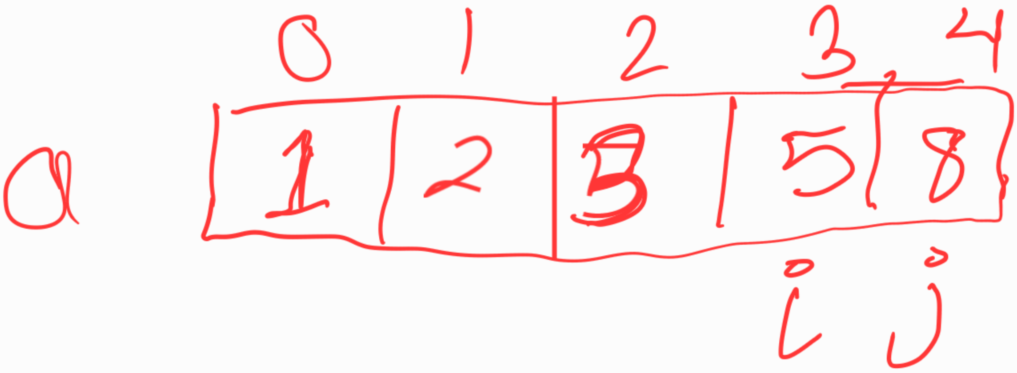
→ Arranging integer values in ascending order.



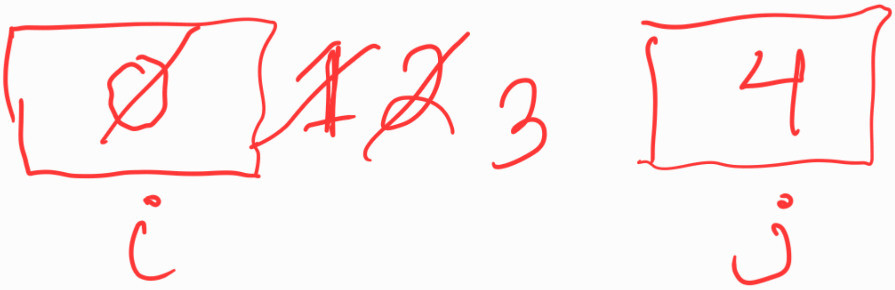
$n=5$

i runs from 0 to 3 (<n-1)

j runs from i+1 to 4 (<n)



if a[i] > a[j] then
swap a[i] & a[j]



```
void ascending_Sort (int a[], int n)
{
        int i, j, temp;
        for ( i =0 ; i<n-1 ; i++)
         {
            for(j=i+1 ; j<n ; j++)
            {
                  if(a[i] > a[j])
                  {
                        temp= a[i];
                        a[i] =a[j];
                        a[j]= temp;
                   }
             }
        }
}
```

(#) 2-Dimensional array

Syntax :-

datatype array-name [size][size];

Example :- int a[3][4];

	0	1	2	3
0	a_{00}	a_{01}	a_{02}	a_{03}
1	a_{10}	a_{11}	a_{12}	a_{13}
2	a_{20}	a_{21}	a_{22}	a_{23}

```
// Reading values
for(i=0 ; i<3 ; i++)
{
    for(j=0 ; j<4 ; j++)
    {
        scanf("%d", &a[i][j]);
    }
}
```

⇓

a[0][0]

a[0][1]

a[0][2]

a[0][3]

a[1][0]

a[1][1]

a[1][2]

⋮

and so on.

```
// Display :-
for(i=0 ;i<3 ; i++)
 {
    for(j=0 ;j<4; j++)
    {
       printf("%d",a[i][j]);
     }
 }
```