

## Steps to solve the problem

1. Create an array of fixed size (maximum capacity), lets say 7.



2. Take n, a variable which stores the number of elements of the array,. **N=7**

3. Iterate via for loop to take array elements as input, and print them.

4. To sort we need nested loop, In the nested loop, the each element will be compared to all the elements below it.

5. In case the element is greater than the element present below it, then they are interchanged

7. After executing the nested loop, we will obtain an array in ascending order arranged elements.

1. Take n, a variable which stores the number of elements of the array,.

```
printf("Enter the value of N \n");  
scanf("%d", &n)
```

N	N	N	N	N	N	N
---	---	---	---	---	---	---

3. Iterate via for loop to take array elements as input.

```
printf("Enter the numbers \n");  
for (i = 0; i < n; ++i)  
scanf("%d", &number[i]);
```

45	56	12	34	65	22	76
----	----	----	----	----	----	----

To sort this array

0	1	2	3	4	5	6
45	56	12	34	65	22	76

```
for (i = 0; i < n; ++i)
{
    for (j = i + 1; j < n; ++j)
    {
        if (number[i] > number[j])
        {
            a = number[i];
            number[i] = number[j];
            number[j] = a;
        }
    }
}
```

45 > 56 (False)

45	56	12	34	65	22	76
----	----	----	----	----	----	----

45 > 12 (True)

a=45

12	56	45	34	65	22	76
----	----	----	----	----	----	----

### 3<sup>rd</sup> Iteration ( j )

```
for (i = 0; i < n; ++i)
{
  for (j = i + 1; j < n; ++j)
  {
    if (number[i] > number[j])
    {
      a = number[i];
      number[i] = number[j];
      number[j] = a;
    }
  }
}
```

12	56	45	34	65	22	76
----	----	----	----	----	----	----



12 > 34 (false)

12	56	45	34	65	22	76
----	----	----	----	----	----	----



56 > 45 (True)

a = 56

12	45	56	34	65	22	76
----	----	----	----	----	----	----





**Finally we will get the ascending order array elements**

12	22	34	45	56	65	76
----	----	----	----	----	----	----



Printed

```
printf("Arranged \n");  
  
for (i = 0; i < n; ++i)  
    printf("%d\n", number[i]);
```