
C
Program

Group name:-

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Project name- ***Array in ascending order***

Program Explanation:-

1. ***Declare an array of some fixed capacity, lets say 30.***
2. ***From users, take a number N as input, which will indicate the number of elements in the array (N <= maximum capacity)***
3. ***Iterating through for loops (from [0 to N)), take integers as input from user and print them. These input are the elements of the array.***
4. ***Now, create a nested for loop with i and j as iterators.***
5. ***Start the sorting in ascending order by extracting each element at position i of outer loop.***
6. ***This element is being compared to every element from position i+1 to size-1 (means all elements present below this extracted element)***
7. ***In case any of the extracted element is greater than the element below it, then these two interchange their position, else the loop continues.***
8. ***After this nested loop gets executed, we get all the elements of the array sorted in ascending order.***

PROGRAM CODE:-

```
#include <stdio.h> int
main()
{
 int i, j, a, n, number[30];
printf("Enter the value of N \n");
scanf("%d", &n);
 printf("Enter the numbers \n");     for
(i = 0; i < n; ++i)
    {
        scanf("%d", &number[i]);
    }
    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;
            }
        }
  }
```

```
   printf("The numbers arranged in ascending order are
given below \n");



   for (i = 0; i < n; ++i)

   {

      printf("%d\n", number[i]);

   }     return 0;
```

Output:

- Enter the value of N
  3

- Enter the numbers 2 3
  4

- The numbers arranged in ascending order
  are given below
    2
    3
    4