

```

using System;
using System.Linq;

namespace LINQwithArray
{
    class Program
    {
        public static void Main(string[] args)
        {
            // create integer array
            int[] values = { 2, 9, 5, 0, 3, 7, 1, 4, 8, 5 };

            // display original values in array
            Console.WriteLine("Original values: ");
            foreach(int element in values)
            {
                Console.WriteLine("{0} ", element);
            }

            // LINQ query that obtains values greater than 4 from the array
            var filtered =
                from value in values
                where value > 4
                select value;

            // display filtered results
            Console.WriteLine("\nArray values greater than 4: ");
            foreach(int element in filtered)
            {
                Console.WriteLine("{0} ", element);
            }

            // sort original array with orderby clause in ascending order
            var sortAscending =
                from value in values
                orderby value
                select value;

            // print sorted array
            Console.WriteLine("\nOriginal array in ascending order: ");
            foreach (int element in sortAscending)
            {
                Console.WriteLine("{0} ", element);
            }

            // sort the LINQ query in descending order
            var sortLINQresultdescending =
                from value in filtered
                orderby value descending
                select value;

            // display filtered in descending order
            Console.WriteLine("\nLINQ query sorted in descending order: ");
            foreach(int element in sortLINQresultdescending)
            {
                Console.WriteLine("{0} ", element);
            }

            // filter original array and sort the results in ascending order
            var sortAndFilter =
                from value in values
                where value > 4
                orderby value
                select value;

            // display filtered and sorted result
            Console.WriteLine("\nOriginal array filtered and sorted: ");
            foreach(int element in sortAndFilter)
            {
                Console.WriteLine("{0} ", element);
            }

            Console.ReadKey();
        } // end main
    }
}

```