|  |  |  |
| --- | --- | --- |
| **LAB101 Assignment** | **Type:** | **Short Assignment** |
| **Code:** | **C.S.P0006** |
| **LOC:** | **40** |
| **Slot(s):** | **1** |

**Title**

Sort an array in ascending and descending order.

**Background Context**

In [computer science](https://en.wikipedia.org/wiki/Computer_science), an array type is a [data type](https://en.wikipedia.org/wiki/Data_type) that is meant to describe a collection of elements ([values](https://en.wikipedia.org/wiki/Value_(computer_science)) or [variables](https://en.wikipedia.org/wiki/Variable_(computer_science))), each selected by one or more indices (identifying keys) that can be computed at [run time](https://en.wikipedia.org/wiki/Run_time_(program_lifecycle_phase)) by the program. Such a collection is usually called an array variable, array value, or simply array.By analogy with the mathematical concepts of [vector](https://en.wikipedia.org/wiki/Vector_(mathematics)) and [matrix](https://en.wikipedia.org/wiki/Matrix_(mathematics)), array types with one and two indices are often called vector type and matrix type, respectively.

**Program Specifications**

Create a program to sort an integer array in ascending and descending order.

***Function details:***

1. Enter an integer array
2. Sort the array in ascending order and display on the screen
3. Sort the array in descending order and display on the screen
4. Exit the program

***Expectation of User interface:***

The Program must have interface as below:

*Please enter size of array: 5*

*Enter element[0]: 10*

*Enter element[1]: 40*

*Enter element[2]: 20*

*Enter element[3]: 15*

*Enter element[4]: 10*

*The array sorted in ascending:*

*10 10 15 20 40*

*The array sorted in descending:*

*40 20 15 10 10*

**Guidelines**