

# July 2023 CSE 316

## Online on the 8086 Assembly Language

### Subsections: A1, A2

December 17, 2023

Suppose, you have an array of words. Your task is to determine whether the elements in the array are sorted in the descending order, in ascending order or are not sorted. You should print an appropriate message in all the cases. You need not take the array as user input. You may declare an array of any length in the data segment and work with it. Note that you must iterate the array elements in a loop.

#### Sample I/O

##### *Case 1*

##### **Input**

10 20 20 30 40 50 60 70 76 80 80 100 110 120 120 120 130

##### **Output**

Ascending

##### *Case 2*

##### **Input**

60 50 40 40 30 20 15 1 0

##### **Output**

Descending

##### *Case 3*

##### **Input**

10 20 30 25 40

##### **Output**

Not sorted

#### Marks Distribution

- Properly declaring the array in the data segment: **1 Mark**
- Iterating the array elements in a loop: **2 Marks**
- Determining whether the array elements are in descending order or not: **3 Marks**
- Determining whether the array elements are in ascending order or not: **3 Marks**
- Printing the correct message to the console: **1 Mark**