**ICS 108 – Object-Oriented Programming**

**Lab # 4 – Searching & Sorting**

**Objectives:**

In this lab, the following topic will be covered:

1. Searching
2. Sorting

**Task**

Write the following method that returns true if the array is already sorted in nondecreasing order:

**public static boolean** **isSorted(int[] array)**

Write a test program that prompts the user to enter an array and displays whether the array is sorted or not **without sorting it.**

Here is a sample run:

Enter the size of the array: 8

Enter the contents of the array: 10 1 5 16 61 9 11 1

The array has 8 integers 10 1 5 16 61 9 11 1

The array is not sorted

Enter the size of the array: 10

Enter the contents of the array: 1 1 3 4 4 5 7 9 11 21

The array has 10 integers 1 1 3 4 4 5 7 9 11 21

The array is sorted