

California State University,
Monterey Bay

Week 5 – Programming Assignment
Sorting Algorithms

Clarence Mitchell

CST370

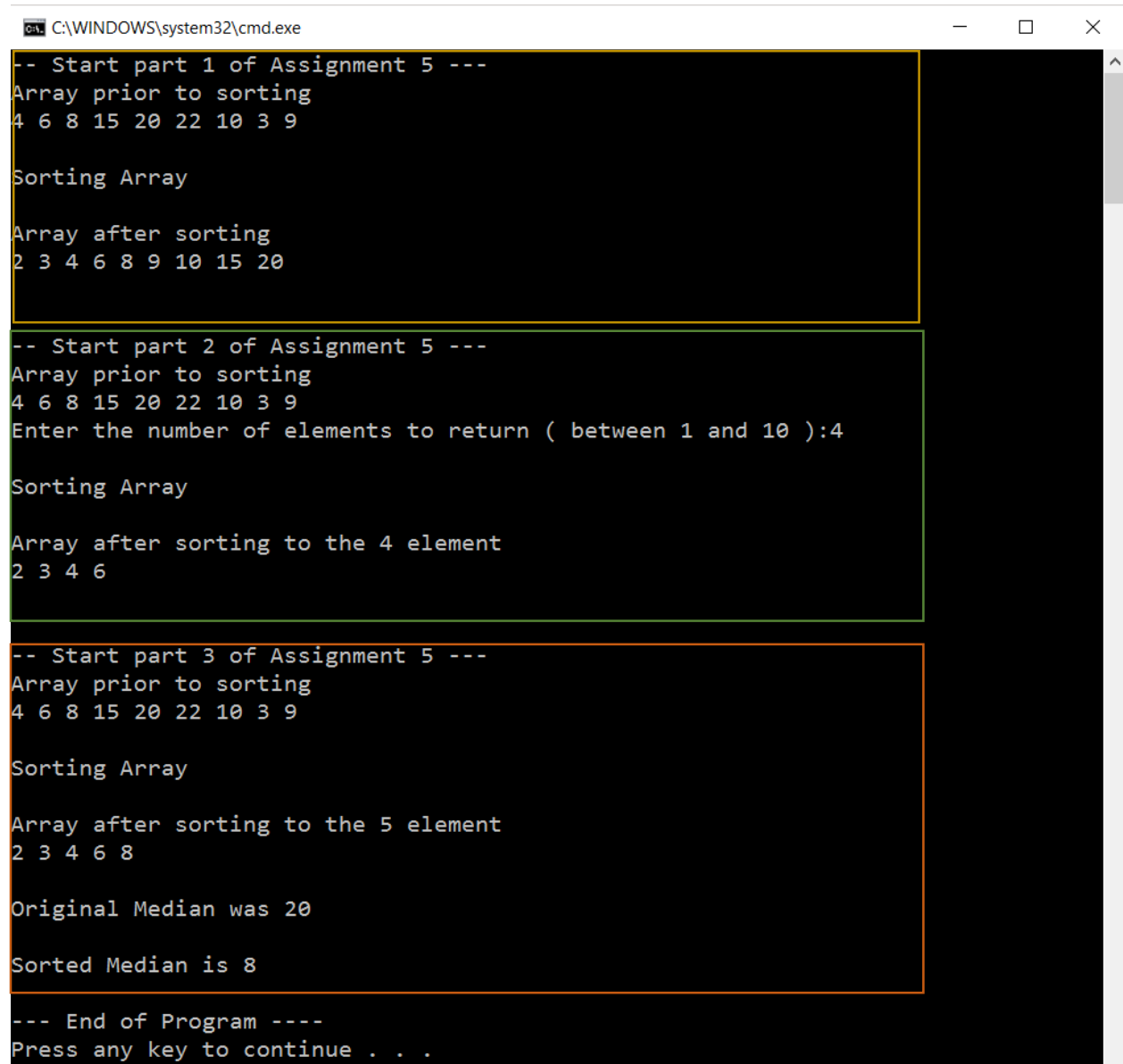
Design and Analysis of Algorithms

Spring 2016

Instructor: Dr. Seetharam

Exercise Screen Shots

Test Run 1



```
C:\WINDOWS\system32\cmd.exe

-- Start part 1 of Assignment 5 ---
Array prior to sorting
4 6 8 15 20 22 10 3 9

Sorting Array

Array after sorting
2 3 4 6 8 9 10 15 20

-- Start part 2 of Assignment 5 ---
Array prior to sorting
4 6 8 15 20 22 10 3 9
Enter the number of elements to return ( between 1 and 10 ):4

Sorting Array

Array after sorting to the 4 element
2 3 4 6

-- Start part 3 of Assignment 5 ---
Array prior to sorting
4 6 8 15 20 22 10 3 9

Sorting Array

Array after sorting to the 5 element
2 3 4 6 8

Original Median was 20

Sorted Median is 8

--- End of Program ---
Press any key to continue . . .
```

Explanation:

A run was made using the input values provided in the specifications and resulted in the following:

Part 1

The input array was sorted using the selection sort and the sort array was displayed

Part 2

The input array was sorted to the K (4th) value using the selection sort and the sort array was displayed

Part 2

The input array was sorted to the K (median) value using the selection sort and the sort array was displayed along with the original median and the new median