

California State University,
Monterey Bay

Week 6 – Lab
Linear and Binary Search

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CST370

Design and Analysis of Algorithms

Spring 2016

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Exercise Screen Shots

Test Run 1

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

-- Start part A of Lab 6 ---
-- Begining Part A - Linear Search

Array prior to searching
4 6 8 15 20 22 10 3 9

Enter value to search for->30

The value of 30 is NOT found in the array

-- Begining Part B - Iterative Binary Search

Array prior to searching
2 3 4 6 8 9 10 15 20

Enter value to search for->1

The value of 1 is NOT found in the array

-- Begining Part C - Recursive Binary Search

Array prior to searching
2 3 4 6 8 9 10 15 20

Enter value to search for->30

The value of 30 is NOT found in the array

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

Explanation:

A run was made for all search routines using values not in the arrays. The return flag from each search routine is NOT found.

Test Run 2

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

-- Start part A of Lab 6 ---
-- Begining Part A - Linear Search

Array prior to searching
4 6 8 15 20 22 10 3 9

Enter value to search for->10

The value of 10 is found in the array

-- Begining Part B - Iterative Binary Search

Array prior to searching
2 3 4 6 8 9 10 15 20

Enter value to search for->20

The value of 20 is found in the array

-- Begining Part C - Recursive Binary Search

Array prior to searching
2 3 4 6 8 9 10 15 20

Enter value to search for->2

The value of 2 is found in the array

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

Explanation

A run was made for all search routines using values in the arrays. The return flag from each search routine is found.