```
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Data Structures 3:00 MWF
2/6/03
P 55 #'s 1, 2, 6, 7 P 83 #'s 1, 4
Pg 55
1.Target = 43
    Low = 0
    High = 9
    Middle = 4
    Low = 0
    High = 3
    Middle = 2
    Low = 0
    High = 1
    Middle = 0
    Not Found
    Target = 40
    Low = 0
    High = 9
    Middle = 4
    Low = 0
    High = 3
    Middle = 2
```

Low = 0

High = 1

```
Found! (Index[1])
    Target = 90
    Low = 0
    High = 9
    Middle = 4
    Low = 5
    High = 9
    Middle = 6
    Low = 7
    High = 9
    Middle = 8
    Found (Index[9])
2.Data Set: 0 1 2 3 4 5 6 7 8 9
    Target = 2 \text{ or } 7
    Best case scenario
     Target = 0, 9
    Worst case scenarios
```

- 6.Yes this search algorithm will work correctly for data but it takes more time than the original algorithm because it is checking values that have already been checked.
- 7. This search algorithm will work correctly for data provided that the index is not zero.

P 83 1.