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Lab 6 Submission

Searching - Search for user input number using Linear search and Iterative and Binary search functions.

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Linear Search function with Input: { 4, 2, 10, 13, 2, 5, 6, 1, 0, -3 } correctly locates last element -3.

Iterative Binary Search function with Input: { 2, 4, 5, 7, 13, 14, 15, 23 } correctly locates last element 23.

Recursive Binary Search function with Input: { 2, 4, 5, 7, 13, 14, 15, 23 } correctly locates first element 2.

```
Enter an integer for Linear Search: -3
true
Enter an integer for Iterative Binary Search: 23
true
Enter an integer for Recursive Binary Search: 2
true
Enter an integer for Recursive Binary Search: 2
true
Press any key to continue . . .
```

Linear Search function with Input: { 4, 2, 10, 13, 2, 5, 6, 1, 0, -3 } correctly returns false for search value: 55.

Iterative Binary Search function with Input: { 2, 4, 5, 7, 13, 14, 15, 23 } correctly returns false for search value: 55.

Recursive Binary Search function with Input: { 2, 4, 5, 7, 13, 14, 15, 23 } correctly returns false for search value: 55.

```
Enter an integer for Linear Search: 55
false
Enter an integer for Iterative Binary Search: 55
false
Enter an integer for Recursive Binary Search: 55
false
Enter an integer for Recursive Binary Search: 55
false
Press any key to continue . . .
```

User input validation correctly accepts only integer values.

```
C:\WINDOWS\system32\cmd.exe
Enter an integer for Linear Search:
Invalid entry
Enter an integer for Linear Search: ;
Invalid entry
Enter an integer for Linear Search: dsfsdaf
Invalid entry
Enter an integer for Linear Search: 5.05
Invalid entry
Enter an integer for Linear Search: jk33
Invalid entry
Enter an integer for Linear Search: 21kdow
Invalid entry
Enter an integer for Linear Search: 5
true
Enter an integer for Iterative Binary Search: laksjdfoiw
Invalid entry
Enter an integer for Iterative Binary Search: 5.5
Invalid entry
Enter an integer for Iterative Binary Search:
Invalid entry
Enter an integer for Iterative Binary Search: 2
true
Enter an integer for Recursive Binary Search: ;[]
Invalid entry
Enter an integer for Recursive Binary Search: {0}
Invalid entry
Enter an integer for Recursive Binary Search: O
false
Press any key to continue . . .
```