```
1 /*// -----
 2 Justin Dang
 3 Student ID: 1148267
 5 array length help:
 6 https://www.tutorialspoint.com/how-do-i-find-the-length-of-an-array-in-c-cplusplus
 8 lazy and wanted to know if there was foreach function:
 9 https://www.geeksforgeeks.org/g-fact-40-foreach-in-c-and-java/
10 */// -----
11 #include <iostream>
12 using namespace std;
13
14 int main()
15 {
16
       int target = 6;
                                      // target value we are looking for
                                     // used to store and "return" index
17
        int targetIndex;
       bool found = false;
                                     // used to determine if the target was found
        int numbers[] = \{0, 7, 9, 1, 2, 3, 7, 5, 8, 7\}; // un-ordered array of ints
19
20
        cout << "Target Number: " << target << endl << "Current array: ";</pre>
21
       for (int x : numbers) {
                                     // prints out array for user
           cout << " " << x;
22
23
        }
24
       cout << "\n\n";
25
        for (int i = 0; i < sizeof(numbers) / sizeof(numbers[0]); i++) {</pre>
26
                                       // for loop cycles through each index from 0 to ₹
                         the size of the given array
27
           if (numbers[i] == target) {// if the in in the array matches the target
             int
28
                cout << "The Number " << target << " is located at numbers["</pre>
29
                    << i << ']' << endl;
               targetIndex = i;
                                       // store the target int index
30
               cout << "TargetIndex: " << targetIndex; // return target index</pre>
31
32
               found = true;
33
           }
34
        if (!found) {
35
           cout << "The target number (" << target << ") was not found in the array"</pre>
36
37
               << endl;
38
           targetIndex = -1;
39
           cout << "TargetIndex: " << targetIndex;// return -1 if not found</pre>
40
        }
41 }
42 // case 1: no target number was located in the array
43 /*
44 Target Number: 6
45 Current array: 0 7 9 1 2 3 4 5 8 7
47 The target number (6) was not found in the array
48 TargetIndex: -1
49 */
```

```
50
51 //case 2: target number was found in array
52 /*
53 Target Number: 6
54 Current array: 0 7 9 1 2 3 6 5 8 7
55
56 The Number 6 is located at numbers[6]
57 TargetIndex: 6
58 */
59
```