In this lab, we will practice the use of arrays.

We will write a program that follows the steps below:

1. Input 6 numbers from the user
   - user inputs numbers one at a time
2. Loop continuously until the exit condition below:
   a) ask the user to search for a query number
   b) if the query number is in the list: reports the first location of the query number in the list, change the number in that position to 0, show the updated list
   c) if the query number is not in the list: exit the loop

You must write at least one new function:
`findAndReplace(array1,...,query)` – take in an array and query number as input (in addition to any other needed inputs); it will return the first location of the query number in the list (or -1 if it is not in the list) and will change the number at that location to 0.

You may receive the number inputs and print all outputs in `int main` if you wish. You may report location based on 0-indexing or 1-indexing (but you need 0-indexing to access the array elements!).

Start early and look over my programming advice online!

As simpler starting steps for partial credit, you can:
- Write your function to return 1 if the query is in the list and 0 if it is not in the list
- Write your function to return the location of the query, but don’t update the location to 0

**Submitting your file:**
Submit the final C++ code as `numberSearch.cpp` using `submit1600` (and verify proper submission using `verify1600`).

**Example execution:**

```
> ./numberSearch
Input number 1 4
Input number 2 -10
Input number 3 8
Input number 4 22
Input number 5 -33
Input number 6 55
Enter a query number: 8
8 was at location 3
```
Current list: 4 -10 0 22 -33 55
Enter a query number: 4
4 was at location 1
Current list: 0 -10 0 22 -33 55
Enter a query number: -10
-10 was at location 2
Current list: 0 0 0 22 -33 55
Enter a query number: 53
53 not in list!
Goodbye!
>