

CSC 501 HOMEWORK 3

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1. HOMEWORK 3A

Write a program that uses an array to allow the user to

- (1) Enter a positive integer number n ,
- (2) Enter n integers that the program reads into an array of size n ,
- (3) Enter another integer x

The program then tells the user how many times the number x occurs in the array.

Here is a sample run of the program:

```
Enter a positive integer number: 6
Enter 6 integer numbers: 12 67 12 34 9 12
You entered [12, 67, 12, 34, 9, 12]
Enter an integer: 59
The number 59 occurs 0 times.
```

Another sample run:

```
Enter a positive integer number: 5
Enter 5 integer numbers: 56 12 89 12 34
You entered [56, 12, 89, 12, 34]
Enter an integer: 12
The number 12 occurs 2 times.
```

2. HOMEWORK 3B

Using a different project, create a modified version of the program above that repeatedly asks the user to enter an integer x and prints the number of times x occurs in the array until the user enters a value of 0 for x .

Here is a sample run of such a problem:

```
Enter a positive integer number: 7
Enter 7 integer numbers: 12 67 45 12 12 45 89
You entered [12, 67, 45, 12, 12, 45, 89]
Enter an integer, 0 to terminate: 12
The number 12 occurs 3 times.
Enter an integer, 0 to terminate: 89
The number 89 occurs 1 times.
Enter an integer, 0 to terminate: 45
The number 45 occurs 2 times.
Enter an integer, 0 to terminate: 0
```

This Assignment is due Monday of Week 5.