

findMaxIndex & getCounts Development

Here, you will implement two of the seven required methods for your program: `findMaxIndex` (method 3) and `getCounts` (method 4). Since other aspects of your program will rely on the correctness of these two methods, we provide several tests for them on this slide. Make sure you pass all tests here, and then you should use these two methods in your program on the next slide!

1 findMaxIndex

First, implement the `findMaxIndex` method. This method should find the **index** of the maximum value in an array of integers. It should also:

- take one parameter, an array of integers
- return the **index** at which the maximum value of the array occurs
 - If the maximum value occurs multiple times, return the index of the first occurrence

Press Mark to test your method. If you've implemented it correctly, you should pass all `findMaxIndex` test cases!

2 getCounts

Once you get `findMaxIndex` working, implement the `getCounts` method.

This method should count the occurrences of each value in an array of integers. It should also:

- take one parameter, an array of integers
- return an array containing the number of times each value occurs in the parameter array

👁️ To help you get started, here is a visual representation of creating a counts (occurrences) array:

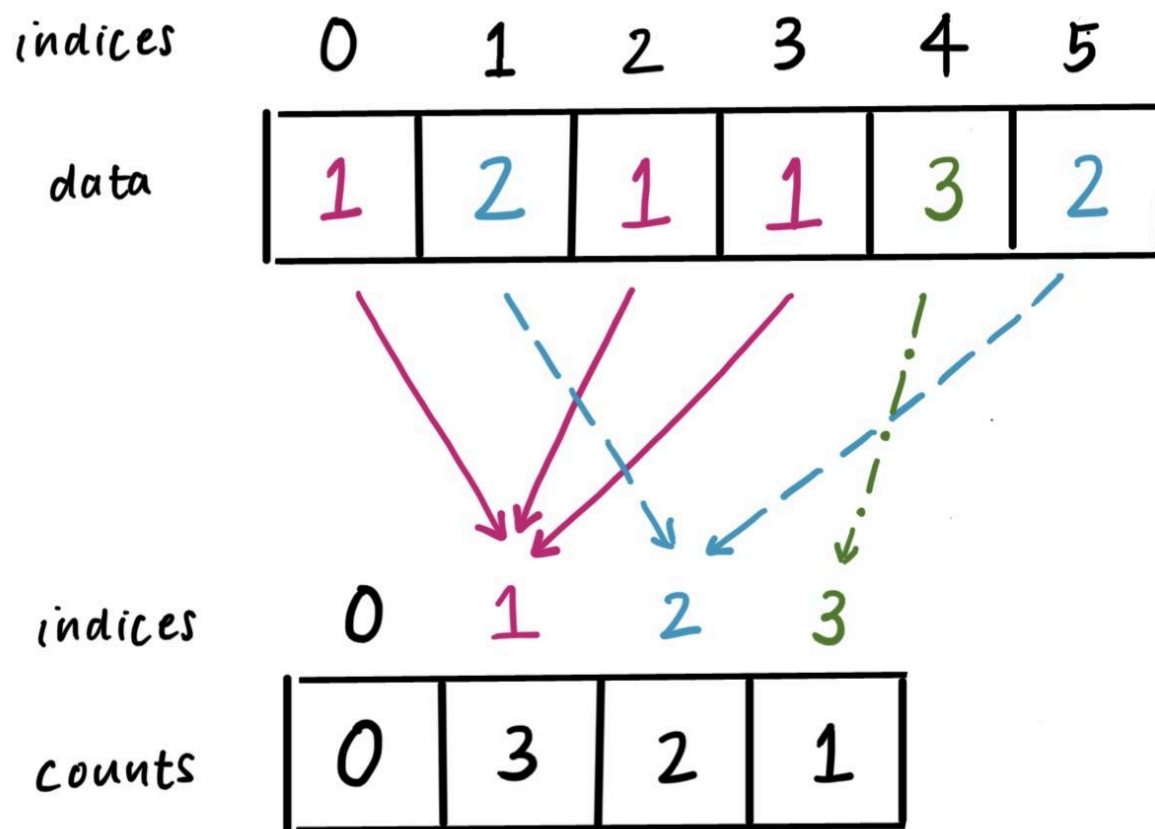


diagram by Kailey Tou

Each **index number of the counts array represents a data value**. Since the largest data value in the data array is 3, the highest index of the counts array must be 3, which means the size of the counts array must be 4.

In this example we have data values of 1, 2, and 3. Note that it's possible to have a data value of 0 in the datasets you will be working with!

NOTE: This slide is **not graded**.

However, we recommend that you do not move on to the rest of the program until you are passing all tests in this slide. You should use these two methods in your program on the next slide (you can copy-paste!).