

Course: **Object-Oriented Programming [B]**

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(Fall 2021)Resource Person: **Dr. Muhammad Faheem****QUIZ – 1 (Arrays and Methods)**

SOLUTION

```
class CS239BQuiz1 {  
  
    // this method searches for the given value before the given occurrence of the key in an array  
    // returns the index if the key is found  
    // otherwise, returns -1  
    static int searchGiven(int[] array, int key, int occurrence, int value) {  
  
        int endSearch = -1;  
        boolean occrFound = false;  
        int occr = 0;  
  
        //search for the given occurrence  
        for(int i = 0; i < array.length; ++i) {  
  
            if(key == array[i]) {  
                ++occr;  
            }//if  
            if(occr == occurrence) {  
                endSearch = i;  
                occrFound = true;  
                break;  
            }//if  
        }//for  
  
        int valueFound = -1;  
        if(occrFound){  
            for(int j=0; j<endSearch;j++){  
                if(array[j] == value){  
                    valueFound = j;  
                    break;  
                }  
            }  
        }  
        return valueFound;  
    }//searchGiven
```

```
public static void main(String[] args) {

    // 1 - create an example array
    int[] array = {1, 2, 5, 2, 1, 2, 7, 5};

    // 2 - declare and initialize a key value
    int key = 2;

    // 3 - declare and initialize an occurrence value
    int occurrence = 3;

    int value = 5;

    // 4 - call the method with the arguments and store the value returned
    int found = searchGiven(array, key, occurrence, value);

    // 5 - print the appropriate message based on the value returned
    if(found != -1)
        System.out.println("The value " + value + " before " + occurrence + " occurrence of the "
+
                                key + " is found at index " + found);
    else
        System.out.println("The value does not exists");

} //main

} //class
```