

Warm Up Question: What is the difference between a private and a public method? How does this affect the usability of the method to outside classes?

1. ***On a piece of paper***, write a method that takes in an array(int or string array, you choose) and an item to search for in the array. Return the index of the element in the array if found and (-1) if not found.

Guiding Questions:

- Give the method a descriptive name, one that is closely related to its functionality.
- What are the formal parameters for this method?
- What are the return types for this method?
- What is the visibility of this method for outside classes?

Once you have handwritten the method, create an empty project in IntelliJ and copy your handwritten solution into the editor. In the main call your method to test it.

- What do you need to do/create in the main before calling your method?

Reflect:

- What did you miss in your handwritten solution? What do you need to review more? What did you have the most trouble with when handwriting the solution?

Now discuss the following questions:

- What is the method header?
- What is the method signature?
- What is the difference between the method header and the method signature?
- Why do we need a method signature, what is its purpose?
 - Is it possible to have two methods with the same signature?
 - What is the parameter list? Please describe the parameter list for this method.
 - What are the arguments for this method? What is another name for arguments? (actual parameters)
- What is the difference between a parameter and an argument?

Assignment 03 Preparation/Help:

2. Create a program that identifies if a given string matches either of the following values, you must use methods in your solution, the main should have very minimal code:
 - a. American
 - b. European

The given input strings to test your program are:

- a. AmmmmeriiCCaN → should match to American
 - b. ammerIcaaNNN → should match to American
 - c. Amer icannn → should match to American
 - d. Europeannnn → should match to European
 - e. euRo ooepaaan → should match to European
- *Hint:* In other words, create a method that applies preprocessing/formatting to the input strings that help in the process of identifying whether they are equivalent to the strings “American” or “European”.
- Please use the inputs(a.b.c.d.e) to test if your method(s) is working correctly.

Guiding/Discussion questions:

1. What will be in your main? (ex: method calls, variables ect..)
 - a. Identify what logic should be in the main and what logic should be in the method.
2. What is a good name for this method?
3. What are the formal parameters for this method?
4. What are the arguments or actual parameters for this metod?
5. What is the return type for this method?
6. What is the method header?
7. What is the method signature?
8. What is the parameter list?
9. What are the formal and actual parameters for this method?

Packages to Reference:

1. https://csc215.ducta.net/ClassMeeting_PACKAGES/CSC101_DucTa/PKG09_Methods01.pdf
2. https://csc215.ducta.net/ClassMeeting_PACKAGES/CSC101_DucTa/PKG06_charAndStringDataTypes.pdf