

Lab 19 -- ArrayUtilities

1. In Eclipse, create a project called Lab19. Create a class called ArrayUtilities.
2. Write each method described below (in the ArrayUtilities class). After writing the method, write some JUnit tests that check to see if it works properly.
 - a) Write a public, static method called `blueToRed`, with return type `void`. The method accepts one parameter, which is an array of `String` references. The method will replace all entries in the array that say “blue” with ones that say “red”. (Note that this is a “destructive” method – it modifies the state of the parameter.)
 - b) Write a public, static method called `intArrayFactory`, which returns an array of `ints`. The method will have one parameter, which is an integer called `n`. The return value should be an array of length `n` that is filled with the integers from 1 through `n`.

For example, if `n` is 7, then the return value would be an array containing these values:
[1, 2, 3, 4, 5, 6, 7]
 - c) Write a public, static method called `duplicator`, which returns an array of `doubles` and accepts an array of `doubles` as a parameter. The method will return an array that contains all the same elements as the parameter, but listed twice.

For example, if the parameter is the array [2.4, 9.6, 177.5] then the return value should be:
[2.4, 9.6, 177.5, 2.4, 9.6, 177.5]
 - d) Write a public, static method called `sevenRemover`, which returns an array of `ints`. The method will have one parameter, which is an array of `integers`. The return value will be an array that contains of all the same values that are contained in the parameter, but without any sevens.

For example, if the parameter looks like the array [5, 7, 2, 7, 8, 1, 3, 7, 7, 4] then the return value should be the array [5, 2, 8, 1, 3, 4].
 - e) Write a public, static method called `primeGenerator`, which returns and array of `ints`. The method will take one parameter, which is an `int` called `count`. The method will return an array containing `count` number of primes.

For example, if `count` is equal to 7, then the return value should be an array containing the first 7 primes:
[2, 3, 5, 7, 11, 13, 17]