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// Subject: StringBuilders, Lists, Sets, & Maps

// Java Week 04 Lab

//

package week04;

public class Week04StringBuilderListSetMapLab {

public static void main(String[] args) {

// 1. Why would we use a StringBuilder instead of a String?

// a. Instantiate a new StringBuilder

// b. Append the characters 0 through 9 to it separated by dashes

// Note: make sure no dash appears at the end of the StringBuilder

// 2. List of String:

// a. Create a list of Strings

// b. Add 5 Strings to it, each with a different length

// 3. Write and test a method that takes a list of strings

// and returns the shortest string

// 4. Write and test a method that takes a list of strings

// and returns the list with the first and last element switched

// 5. Write and test a method that takes a list of strings

// and returns a string with all the list elements concatenated to each other,

// separated by a comma

// 6. Write and test a method that takes a list of strings and a string

// and returns a new list with all strings from the original list

// containing the second string parameter (i.e. like a search method)

// 7. Write and test a method that takes a list of integers

// and returns a List<List<Integer>> with the following conditions specified

// for the return value:

// a. The first List in the returned value contains any number from the input list

// that is divisible by 2

// b. The second List contains values from the input list that are divisible by 3

// c. The third containing values divisible by 5, and

// d. The fourth all numbers from the input List not divisible by 2, 3, or 5

// 8. Write and test a method that takes a list of strings

// and returns a list of integers that contains the length of each string

// 9. Create a set of strings and add 5 values

// 10. Write and test a method that takes a set of strings and a character

// and returns a set of strings consisting of all the strings in the

// input set that start with the character parameter.

// 11. Write and test a method that takes a set of strings

// and returns a list of the same strings

// 12. Write and test a method that takes a set of integers

// and returns a new set of integers containing only even numbers

// from the original set

// 13. Create a map of string and string and add 3 items to it where the key of each

// is a word and the value is the definition of the word

// 14. Write and test a method that takes a Map<String, String> and a string

// and returns the value for a key in the map that matches the

// string parameter (i.e. like a language dictionary lookup)

// 15. Write and test a method that takes a List<String>

// and returns a Map<Character, Integer> containing a count of

// all the strings that start with a given character

}

// Method 15:

// Method 14:

// Method 12:

// Method 11:

// Method 10:

// Method 8:

// Method 7:

// Method 6:

// Method 5:

// Method 4:

// Method 3:

}