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import java.util.Arrays;

public class StringPractice {
    /*
     * returns true if c is a punctuation mark or false otherwise
     *
     * Punctuation mark is defined as:
     * apostrophe '
     * comma ,
     * period .
     * semicolon ;
     * colon :
     * exclamation point !
     * question mark ?
     *
     * (You don't have to worry about any others)
     */
    public static boolean isPunct(char c) {
        char[] Punctuations = { '\\', ',', '.', ';', ':', '!', '?' };
        for (int i = 0; i < Punctuations.length; i++) {
            if (Punctuations[i] == c) {
                return true;
            }
        }
        return false;
    }

    /*
     * returns the number of punctuation marks
     * found in s.
     *
     * call your isPunct( ) method. Do not copy and paste
     * the same logic into this function
     */
    public static int numPunct(String s) {

        int count = 0;
        for (int i = 0; i < s.length(); i++) {
            if (isPunct(s.charAt(i)) == true) {
                count++;
            }
        }
        return count;
    }

    /*
     * returns the number of punctuation marks
     * found in s starting at the given index.
     *
     * call your isPunct( ) method. Do not copy and paste
     * the same logic into this function
     */
    public static int numPunct(String s, int startIndex) {
        int count = 0;
        for (int i = startIndex; i < s.length(); i++) {
            if (isPunct(s.charAt(i)) == true) {
                count++;
            }
        }
        return count;
    }

    /*
     * returns the index of the first occurrence

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* of a punctuation mark in s starting
* from index startPosition or -1 if there are
* none at index startPosition or later.
*
* When implementing this function, call your isPunct( ) method.
* Do not simply copy and paste the body of isPunct( ) into this method.
*/
public static int indexOfFirstPunct(String s, int startPosition) {
    for (int i = startPosition; i < s.length(); i++) {
        if (isPunct(s.charAt(i)) == true) {
            return i;
        }
    }
    return -1;
}

/*
* returns the index of the first punctuation mark in s or
* -1 if s contains no punctuation marks
*
* use your solution to indexOfFirstPunct(String s, int startPosition)
* in this function. Do not repeat the same logic.
*
* Notice that this method has the same name as the
* previous one, but that it takes a different number of arguments. This is
* perfectly legal in Java. It's called "method overloading"
*/
public static int indexOfFirstPunct(String s) {
    for (int i = 0; i < s.length(); i++) {
        if (isPunct(s.charAt(i)) == true) {
            return i;
        }
    }
    return -1;
}

/*
* returns the index of the last occurrence of a punctuation
* mark in s or -1 if s contains no punctuation
*
* When implementing this function, call your isPunct( ) method.
* Do not simply copy and paste the body of isPunct( ) into this method.
*/
public static int indexOfLastPunct(String s) {
    for (int i = s.length() - 1; i >= 0; i--) {
        if (isPunct(s.charAt(i)) == true) {
            return i;
        }
    }
    return -1;
}

/*
* returns a new String which is the same as s but with
* each instance of oldChar replaced with newChar
*/
public static String substitute(String s, char oldChar, char newChar) {
    for (int i = 0; i < s.length(); i++) {
        if (s.charAt(i) == oldChar) {
            s = s.replace(oldChar, newChar);
        }
    }
    return s;
}
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}

/*
 * returns a new String which is the same as s, but
 * with each instance of a punctuation mark replaced
 * with a single space character
 *
 * Use at least one of your other functions in your
 * solution to this.
 */
public static String substitutePunct(String s) {
    for (int i = 0; i < s.length(); i++) {
        if (isPunct(s.charAt(i)) == true) {
            s = s.replace(s.charAt(i), ' ');
        }
    }
    return s;
}

/*
 * returns a new String which is the same as s,
 * but with all of the punctuation
 * marks removed.
 *
 * Use at least one of your other functions
 * in your solution to this one.
 */
public static String withoutPunct(String s) {
    for (int i = s.length() - 1; i >= 0; i--) {
        System.out.println("s = " + s.charAt(i));
        if (isPunct(s.charAt(i)) == true) {
            s = s.replace(Character.toString(s.charAt(i)), "");
        }
    }
    return s;
}

/* returns true if c is found in s or false otherwise */
public static boolean foundIn(String s, char c) {
    for (int i = 0; i < s.length(); i++) {
        if (s.charAt(i) == c) {
            return true;
        }
    }
    return false;
}

/*
 * Returns true if s contains none of the characters
 * found in chars or false otherwise.
 */
public static boolean containsNone(String s, String chars) {
    char[] ch = chars.toCharArray();
    char[] s_to_char = s.toCharArray();
    System.out.println(ch);
    System.out.println(Arrays.toString(s_to_char));

    for (int i = 0; i < ch.length; i++) {
        if (Arrays.toString(s_to_char).contains(String.valueOf(ch[i]))) {
            System.out.println(ch[i]);
            return false;
        }
    }
}
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        return true;
    }

    /*
     * Returns true if s is comprised of only punctuation or
     * false otherwise
     *
     * Use at least one of your other
     * functions in this one.
     */
    public static boolean onlyPunct(String s) {
        for (int i = 0; i < s.length(); i++) {
            if (isPunct(s.charAt(i)) == false) {
                return false;
            }
        }
        return true;
    }

    /*
     * Returns true if s contains no punctuation or
     * false otherwise
     *
     * Use at least one of your other
     * functions in this one.
     */
    public static boolean noPunct(String s) {
        for (int i = 0; i < s.length(); i++) {
            if (isPunct(s.charAt(i)) == true) {
                return false;
            }
        }
        return true;
    }

    /*
     * returns true if s has two punctuation marks
     * right next to each other or false otherwise
     *
     * use at least one of your other methods
     * in your solution to this method
     */
    public static boolean consecutivePuncts(String s) {
        if (s.length() > 1) {
            for (int i = 0; i < s.length() - 1; i++) {
                if (isPunct(s.charAt(i)) == true && isPunct(s.charAt(i + 1))) {
                    return true;
                }
            }
        }
        return false;
    }
}
```