3. Many encoded strings contain *delimiters*. A delimiter is a non-empty string that acts as a boundary between different parts of a larger string. The delimiters involved in this question occur in pairs that must be *balanced*, with each pair having an open delimiter and a close delimiter. There will be only one type of delimiter for each string. The following are examples of delimiters.

Example 1
Expressions in mathematics use open parentheses `"("` and close parentheses `")"` as delimiters. For each open parenthesis, there must be a matching close parenthesis.

    (x + y) * 5   is a valid mathematical expression.

    (x + (y)   is NOT a valid mathematical expression because there are more open delimiters
                         than close delimiters.

Example 2
HTML uses `<B>` and `</B>` as delimiters. For each open delimiter `<B>,` there must be a matching close delimiter `</B>`.

    <B> Make this text bold </B>   is valid HTML.

    <B> Make this text bold </UB>   is NOT valid HTML because there is one open
                                          delimiter and no matching close delimiter.

GO ON TO THE NEXT PAGE.

In this question, you will write two methods in the following `Delimiters` class.

```
public class Delimiters
{

    /** The open and close delimiters. */
    private String openDel;
    private String closeDel;

    /** Constructs a Delimiters object where open is the open delimiter and close is the
     *    close delimiter.
     *    Precondition: open and close are non-empty strings.
     */
    public Delimiters(String open, String close)
    {
        openDel = open;
        closeDel = close;
    }

    /** Returns an ArrayList of delimiters from the array tokens, as described in part (a). */
    public ArrayList<String> getDelimitersList(String[] tokens)
    {   /* to be implemented in part (a) */   }

    /** Returns true if the delimiters are balanced and false otherwise, as described in part (b).
     *    Precondition: delimiters contains only valid open and close delimiters.
     */
    public boolean isBalanced(ArrayList<String> delimiters)
    {   /* to be implemented in part (b) */   }

    // There may be instance variables, constructors, and methods that are not shown.

}
```