

**Exercise - Design by Contract (45 minutes)**

The file `Document.java` contains a Java class named `Document` that represents the concept of a text document (i.e., think text editor). A `Document` object stores the content of a text document, and provides operations for manipulating it. Your task is to comment all of the methods on the `Document` class in a Design by Contract style by adding PRE and POST conditions. To show how this is done, some of the simpler methods have already been commented for you. Make your PRE and POST conditions as precise as possible. Among other things, the POST conditions on each method should describe the effect the method has on the document's length and content, as well as the cursor position.

Submit your solution on Canvas.