Lab 9

Exceptions

StringAux
- characters : char[ ]
+StringAux(source : String)
+copyString(source : String)
+charAt(index : int) : char
+getSubString(index : int , size : int) : String

The class described above shows an implementation of a String class. It is specified as follows:

characters[ ]	An array of characters to hold the String
StringAux(source : String)	A constructor that copies the content of the argument into the array using the copyString( ) method and handles the exceptions thrown by setting a single space character in the array without displaying any messages.
copyString(source : String)	A method that copies the characters within the source String into the characters array. This method throws an exception if the source String is null.

charAt(index : int) : char	A method that returns a character at the specified index within the array. An exception is thrown when the index requested is out of bounds.
getSubString(index : int, size : int) : String	A method that returns a String of the specified size comprising of the characters starting from the index specified using the method charAt( ). It should handle the exceptions thrown by displaying a message to the user and returning as much of the substring as possible. If a substring cannot be created, return null.

Write a main method to test the class. You must show instances of triggering the following exceptions:

- ArrayIndexOutOfBoundsException
- NullPointerException

As well as showing regular behavior of the class and methods.