Text Component — A Brief Summary

Range of values: any string of characters
Initial value: "" (the empty string of characters)

Assignment operator: =

Relational operators:

== (equal)
!= (not equal)
< (less than and not equal)
<= (less than or equal)
> (greater than and not equal)
>= (greater than or equal)

Input and output:
Assume that input is an object of type Character_IStream, that output is an object of type Character_OStream, and that t is an object of type Text.

• To input a value for t use input >> t.
• To output the value of t use output << t.

Note: For input >> t, the value of t becomes the string of characters from the stream input up to and not including the next newline character, or, if there is no newline character in the remaining stream, up to the end of the stream. The newline character is removed from input and discarded.

Conversion operators:
Assume that t is an object of type Text.

• To convert the value of t to a Boolean use To_Boolean (t).
  Note: The value of t must be optional white space followed by 0 or 1 followed by more optional white space.

• To convert the value of t to a character use To_Character (t).
  Note: The value of t must contain one or more characters and the value of To_Character (t) is the left-most character in t.

• To convert the value of t to an integer use To_Integer (t).
  Note: The value of t must be optional white space followed by a string of characters that represents an integer value (including an optional leading + or -) followed by more optional white space.

• To convert the value of t to a real use To_Real (t).
  Note: The value of t must be optional white space followed by a string of characters that represents a real value (including using scientific notation) followed by more optional white space.

Important Note:
Later, there will be additional reading material for the Text component.