

Black Box Test Plan: TabConverter program

Introduction: Each test case below assumes the **TabConverter** program is running and that the instructions for running the program have been displayed for the user. The text in bold in the **Description** column represents the test inputs to the program. You can stop program execution by pressing Ctrl+C.

Test Files: (List each test file below. Submit each file when you submit your project)

HINT: The Unix diff command may be used to tell whether or not two files are identical. For example,
`diff test-files/ExpandedWomenInCS.txt test-files/exp_ExpandedWomenInCS.txt`

Test ID	Description	Expected Results	Actual Results
testQuit Author: Dr. Balik	Preconditions: TabConverter program started **HEADER** Enter input filename or Q to quit: Q	Program quits.	Program quits.test
testInvalidOption Author: Dr. Balik	Preconditions: TabConverter program started **HEADER** Enter input filename or Q to quit: test-files/WomenInCS.txt Enter output filename: test-files/expand.txt Enter E-xpand or U-nexpand: expand Enter input filename or Q to quit: q	Invalid option	Invalid option

testInputFileNotFound Author: Dr. Balik	Preconditions: TabConverter program started **HEADER** Enter input filename or Q to quit: test-files/notafile.txt	File does not exist Enter input filename or Q to quit:	File does not exist Enter input filename or Q to quit:q
testOutputFileExists Author: Dr. Balik	Preconditions: TabConverter program started **HEADER** Enter input filename or Q to quit: test-files/WomenInCS.txt Enter output filename: test-files/OverwriteTest.txt	test-files/OverwriteTest.txt exists - OK to overwrite (y,n)?:	test-files/OverwriteTest.txt exists - OK to overwrite (y,n)?:

<p>testOutputFileNotOverwritten</p> <p>Author: Dr. Balik</p>	<p>Check timestamp on OverwriteTest.txt ls -l test-files/OverwriteTest.txt</p> <p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/WomenInCS.txt</p> <p>Enter output filename: test-files/OverwriteTest.txt</p> <p>test-files/OverwriteTest.txt exists - OK to overwrite (y,n)?: n</p> <p>Enter input filename or Q to quit: q</p> <p>Recheck timestamp ls -l test-files/OverwriteTest.txt</p>	<p>Date and time for test-files/OverwriteTest.txt has not changed</p>	<p>Date and time for test-files/OverwriteTest.txt has not changed (-rw-r--r-- 1 cpark 197609 0 Mar 15 20:51 test-files/OverwriteTest.txt)</p>
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<p>testOutputFileOverwritten</p> <p>Author: Dr. Balik</p>	<p>Check timestamp on OverwriteTest.txt ls -l test-files/OverwriteTest.txt</p> <p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/WomenInCS.txt</p> <p>Enter output filename: test-files/OverwriteTest.txt</p> <p>test-files/OverwriteTest.txt exists - OK to overwrite (y,n)?: y</p> <p>Enter E-xpand or U-nexpand: E</p> <p>Enter number of spaces: 4</p> <p>Enter input filename or Q to quit: Q</p> <p>Recheck timestamp ls -l test-files/OverwriteTest.txt</p>	<p>Date and time for test-files/OverwriteTest.txt has changed</p>	<p>Date and time for test-files/OverwriteTest.txt has changed</p> <p>(-rw-r--r-- 1 cpark 197609 0 Mar 15 20:57 test-files/OverwriteTest.txt)</p>
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<p>testExpandChangeSpacesToDefaultOf2</p> <p>Author: Dr. Balik</p>	<p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/test1.txt</p> <p>Enter output filename: test-files/test1Expand.txt</p> <p>Enter E-xpand or U-nexpand: E</p> <p>Enter number of spaces: -1</p> <p>Enter input filename or Q to quit: q</p>	<p>test1Expand.txt is created in the test-files directory.</p> <p>test1Expand.txt is exactly the same as exp_test1Expand.txt</p>	<p>test1Expand.txt is created in the test-files directory.</p> <p>test1Expand.txt is exactly the same as exp_test1Expand.txt</p>
<p>testUnexpandWith2Spaces</p> <p>Author: Dr. Balik</p>	<p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/exp_test1Expand.txt</p> <p>Enter output filename: test-files/test1Unexpand.txt</p> <p>Enter E-xpand or U-nexpand: U</p> <p>Enter number of spaces: 2</p> <p>Enter input filename or Q to quit: q</p>	<p>test1Unexpand.txt is created in the test-files directory.</p> <p>test1Unexpand.txt is exactly the same as test1.txt</p>	<p>test1Unexpand.txt is created in the test-files directory.</p> <p>test1Unexpand.txt is exactly the same as test1.txt</p>

<p>testExpandWithSpacesGreaterThan2</p> <p>Author: Christine Park</p>	<p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/test2.txt</p> <p>Enter output filename: test-files/test2Expand.txt</p> <p>Enter E-xpand or U-nexpand: E</p> <p>Enter number of spaces: 5</p> <p>Enter input filename or Q to quit: q</p>	<p>test2Expand.txt is created in the test-files directory.</p> <p>test2Expand.txt is exactly the same as exp_test2Expand.txt</p>	<p>test2Expand.txt is created in the test-files directory.</p> <p>test2Expand.txt is exactly the same as exp_test2Expand.txt</p>
<p>testUnexpandWithSpacesGreaterThan2</p> <p>Author: Christine Park</p>	<p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/exp_test2Expand.txt</p> <p>Enter output filename: test-files/test2Unexpand.txt</p> <p>Enter E-xpand or U-nexpand: U</p> <p>Enter number of spaces: 5</p> <p>Enter input filename or Q to quit: q</p>	<p>test2Unexpand.txt is created in the test-files directory.</p> <p>test2Unexpand.txt is exactly the same as test2.txt</p>	<p>test2Unexpand.txt is created in the test-files directory.</p> <p>test2Unexpand.txt is exactly the same as test2.txt</p>

testExpandWithCharactersAndWhiteSpaceOnlyNoTabs Author: Christine Park	<p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/test3.txt</p> <p>Enter output filename: test-files/test3Expand.txt</p> <p>Enter E-xpand or U-nexpand: E</p> <p>Enter number of spaces: 5</p> <p>Enter input filename or Q to quit: q</p>	<p>test3Expand.txt is created in the test-files directory.</p> <p>test3Expand.txt is exactly the same as test3.txt.</p>	<p>test3Expand.txt is created in the test-files directory.</p> <p>test3Expand.txt is exactly the same as test3.txt.</p>
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<p>testUnexpandWithCharactersAndSingleWhiteSpaceOnlyNoTabs</p> <p>Author: Christine Park</p>	<p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/exp_test3Expand.txt</p> <p>Enter output filename: test-files/test3Unexpand.txt</p> <p>Enter E-xpand or U-nexpand: u</p> <p>Enter number of spaces: 5</p> <p>Enter input filename or Q to quit: q</p>	<p>test3Unexpand.txt is created in the test-files directory.</p> <p>test3Unexpand.txt is exactly the same as test3.txt.</p>	<p>test3Unexpand.txt is created in the test-files directory.</p> <p>test3Unexpand.txt is exactly the same as test3.txt.</p>
<p>testExpandStartingWithSingleSpaceandHasTabs</p> <p>Author: Christine Park</p>	<p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/test4.txt</p> <p>Enter output filename: test-files/test4Expand.txt</p> <p>Enter E-xpand or U-nexpand: E</p> <p>Enter number of spaces: 6</p> <p>Enter input filename or Q to quit: q</p>	<p>test4Expand.txt is created in the test-files directory.</p> <p>test4Expand.txt is exactly the same as exp_test4Expand.txt.</p>	<p>test4Expand.txt is created in the test-files directory.</p> <p>test4Expand.txt is exactly the same as exp_test4Expand.txt.</p>

<p>testUnexpandStartingWithSingleSpaceandHasTabs</p> <p>Author: Christine Park</p>	<p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/exp_test4Expand.txt</p> <p>Enter output filename: test-files/test4Unexpand.txt</p> <p>Enter E-xpand or U-nexpand: u</p> <p>Enter number of spaces: 6</p> <p>Enter input filename or Q to quit: q</p>	<p>test4Unexpand.txt is created in the test-files directory.</p> <p>test4Unexpand.txt is exactly the same as test4.txt.</p>	<p>test4Unexpand.txt is created in the test-files directory.</p> <p>test4Unexpand.txt is exactly the same as test4.txt.</p>
<p>testExpandStartingWithSingleTab</p> <p>Author: Christine Park</p>	<p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/test5.txt</p> <p>Enter output filename: test-files/test5Expand.txt</p> <p>Enter E-xpand or U-nexpand: E</p> <p>Enter number of spaces: 6</p> <p>Enter input filename or Q to quit: q</p>	<p>test5Expand.txt is created in the test-files directory.</p> <p>test5Expand.txt is exactly the same as exp_test5Expand.txt.</p>	<p>test5Expand.txt is created in the test-files directory.</p> <p>test5Expand.txt is exactly the same as exp_test5Expand.txt.</p>

<p>testUnexpandStartingWithSingleTab</p> <p>Author: Christine Park</p>	<p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/test5.txt</p> <p>Enter output filename: test-files/test5Expand.txt</p> <p>Enter E-xpand or U-nexpand: u</p> <p>Enter number of spaces: 6</p> <p>Enter input filename or Q to quit: q</p>	<p>test5Unexpand.txt is created in the test-files directory.</p> <p>test5Unexpand.txt is exactly the same as test5.txt.</p>	<p>test5Unexpand.txt is created in the test-files directory.</p> <p>test5Unexpand.txt is exactly the same as test5.txt.</p>
<p>testExpandLargeFileWithSingleSpaces</p> <p>Author: Dr. Balik</p>	<p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/WomenInCS.txt</p> <p>Enter output filename: test-files/ExpandedWomenInCS.txt</p> <p>Enter E-xpand or U-nexpand: e</p> <p>Enter number of spaces: 3</p> <p>Enter input filename or Q to quit: q</p>	<p>ExpandedWomenInCS.txt is created in the test-files directory.</p> <p>ExpandedWomenInCS.txt is exactly the same as exp_ExpandedWomenInCS.txt</p>	<p>ExpandedWomenInCS.txt is created in the test-files directory.</p> <p>ExpandedWomenInCS.txt is exactly the same as exp_ExpandedWomenInCS.txt</p>

<p>testUnexpandLargeFile WithSingleSpaces</p> <p>Author: Dr. Balik</p>	<p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/exp_ExpandedWomenInCS.txt</p> <p>Enter output filename: UnexpandedWomenInCS.txt</p> <p>Enter E-xpand or U-nexpand: U</p> <p>Enter number of spaces: 3</p> <p>Enter input filename or Q to quit: Q</p>	<p>UnexpandedWomenInCS.txt is created in the test-files directory.</p> <p>UnexpandedWomenInCS.txt is exactly the same as WomenInCS.txt</p>	<p>UnexpandedWomenInCS.txt is created in the test-files directory.</p> <p>UnexpandedWomenInCS.txt is exactly the same as WomenInCS.txt</p>
<p>testExpandLargeFileWith MultipleSpacesAndTabs</p> <p>Author: Dr. Balik</p>	<p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/MultipleSpacesAndTabs.txt</p> <p>Enter output filename: test-files/ExpandedMultipleSpacesAndTabs.txt</p> <p>Enter E-xpand or U-nexpand: e</p> <p>Enter number of spaces: 2</p> <p>Enter input filename or Q to quit: q</p>	<p>ExpandedMultipleSpacesAndTabs.txt is created in the test-files directory.</p> <p>ExpandedMultipleSpacesAndTabs.txt is exactly the same as exp_ExpandedMultipleSpacesAndTabs.txt</p>	<p>ExpandedMultipleSpacesAndTabs.txt is created in the test-files directory.</p> <p>ExpandedMultipleSpacesAndTabs.txt is exactly the same as exp_ExpandedMultipleSpacesAndTabs.txt</p>

<p>testUnexpandLargeFile WithMultipleSpacesAnd Tabs</p> <p>Author: Dr. Balik</p>	<p>Preconditions: TabConverter program started</p> <p>**HEADER**</p> <p>Enter input filename or Q to quit: test-files/exp_ExpandedMultipleSpacesAndTabs.txt</p> <p>Enter output filename: test-files/UnexpandedMultipleSpacesAndTabs.txt</p> <p>Enter E-xpand or U-nexpand: u</p> <p>Enter number of spaces: 2</p>	<p>UnexpandedMultipleSpacesAndTabs.txt is created in the test-files directory.</p> <p>UnexpandedMultipleSpacesAndTabs.txt is exactly the same as exp_UnexpandedMultipleSpacesAndTabs.txt</p>	<p>UnexpandedMultipleSpacesAndTabs.txt is created in the test-files directory.</p> <p>UnexpandedMultipleSpacesAndTabs.txt is exactly the same as exp_UnexpandedMultipleSpacesAndTabs.txt</p>