

Black Box Test Plan: Compression program

Introduction: Each test case below assumes the **Compression** 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 computer.txt decompressedComputer.txt
```

Test ID	Description	Expected Results	Actual Results
testInvalidAction Author: Dr. Balik	Preconditions: Compression program started **HEADER** Enter C-ompress, D-eompress, or Q-uit: Compress (Ctrl+C to stop execution)	Invalid Action User is reprompted to enter action	Invalid Action User is reprompted to enter action
testQuit Author: Dr. Balik	Preconditions: Compression program started **HEADER** Enter C-ompress, D-eompress, or Q-uit: q	Program quits.	Program quits.

<p>testCompressSingleWord</p> <p>Author: Dr. Balik</p>	<p>Preconditions: Compression program started</p> <p>**HEADER**</p> <p>Enter C-ompress, D-decompress, or Q-uit: C</p> <p>Enter input file: test-files/Test1.txt</p> <p>Enter output file: test-files/Test1Compress.txt</p>	<p>Test1Compress.txt is created in the test-files directory.</p> <p>Test1Compress.txt is exactly the same as Test1Compress_Exp.txt: +t#@</p>	<p>Test1Compress.txt is exactly the same as Test1Compress_Exp.txt: +t#@</p>
<p>testDecompressSingleWord</p> <p>Author: Dr. Balik</p>	<p>Preconditions: Compression program started</p> <p>**HEADER**</p> <p>Enter C-ompress, D-decompress, or Q-uit: d</p> <p>Enter input file: test-files/Test1Compress_Exp.txt</p> <p>Enter output file: test-files/Test1Decompress.txt</p>	<p>Test1Decompress.txt is created in the test-files directory.</p> <p>Test1Decompress.txt contains exactly the same characters as Test1.txt: mentioing</p>	<p>Test1Decompress.txt contains exactly the same characters as Test1.txt: mentioing</p>

Testing individual	<p>Preconditions: Compression program started</p> <p>**HEADER**</p> <p>Enter C-ompress, D-decompress, or Q-uit: C</p> <p>Enter input file: test-files/individual.txt</p> <p>Enter output file: test-files/after.txt</p>	<p>individual.txt is created in the test-files directory.</p> <p>after.txt contains exactly the same characters as individual_compressed.txt</p>	after.txt contains exactly the same characters as individual_compressed.txt
Testing individual	<p>Preconditions: Compression program started</p> <p>**HEADER**</p> <p>Enter C-ompress, D-decompress, or Q-uit: D</p> <p>Enter input file: test-files/individual_compressed.txt</p> <p>Enter output file: test-files/after.txt</p>	<p>individual_compressed.txt is created in the test-files directory.</p> <p>after.txt contains exactly the same characters as individual.txt</p>	after.txt contains exactly the same characters as individual.txt
Apostrophe and quotation	<p>Preconditions: Compression program started</p> <p>**HEADER**</p> <p>Enter C-ompress, D-decompress, or Q-uit: C</p> <p>Enter input file: test-files/pasta.txt</p> <p>Enter output file: test-files/after.txt</p>	<p>pasta.txt is created in the test-files directory.</p> <p>after.txt contains exactly the same characters as pasta_compressed.txt</p>	after.txt contains exactly the same characters as pasta_compressed.txt

<p>Apostrophe and quotation</p>	<p>Preconditions: Compression program started</p> <p>**HEADER**</p> <p>Enter C-ompress, D-decompress, or Q-uit: D</p> <p>Enter input file: test-files/pasta_compressed.txt</p> <p>Enter output file: test-files/after.txt</p>	<p>pasta_compressed.txt is created in the test-files directory.</p> <p>after.txt contains exactly the same characters as pasta.txt</p>	<p>after.txt contains exactly the same characters as pasta.txt</p>
<p>Multiple instances of same compression</p>	<p>Preconditions: Compression program started</p> <p>**HEADER**</p> <p>Enter C-ompress, D-decompress, or Q-uit: C</p> <p>Enter input file: test-files/mult.txt</p> <p>Enter output file: test-files/after.txt</p>	<p>mult.txt is created in the test-files directory.</p> <p>after.txt contains exactly the same characters as mult_compressed.txt</p>	<p>after.txt contains exactly the same characters as mult_compressed.txt</p>
<p>Multiple instances of same decompression</p>	<p>Preconditions: Compression program started</p> <p>**HEADER**</p> <p>Enter C-ompress, D-decompress, or Q-uit: D</p> <p>Enter input file: test-files/mult_compressed.txt</p> <p>Enter output file: test-files/after.txt</p>	<p>mult_compressed.txt is created in the test-files directory.</p> <p>after.txt contains exactly the same characters as mult.txt</p>	<p>after.txt contains exactly the same characters as mult.txt</p>

Testing at start and end of text	<p>Preconditions: Compression program started</p> <p>**HEADER**</p> <p>Enter C-ompress, D-decompress, or Q-uit: C</p> <p>Enter input file: test-files/start_end.txt</p> <p>Enter output file: test-files/after.txt</p>	<p>start_end.txt is created in the test-files directory.</p> <p>after.txt contains exactly the same characters as start_end_compressed.txt</p>	after.txt contains exactly the same characters as start_end_compressed.txt
Testing at start and end of text	<p>Preconditions: Compression program started</p> <p>**HEADER**</p> <p>Enter C-ompress, D-decompress, or Q-uit: D</p> <p>Enter input file: test-files/start_end_compressed.txt</p> <p>Enter output file: test-files/after.txt</p>	<p>start_end_compressed.txt is created in the test-files directory.</p> <p>after.txt contains exactly the same characters as start_end.txt</p>	after.txt contains exactly the same characters as start_end.txt
testCompressLargeFile Author: Dr. Balik	<p>Preconditions: Compression program started</p> <p>**HEADER**</p> <p>Enter C-ompress, D-decompress, or Q-uit: c</p> <p>Enter input file: test-files/computer.txt</p> <p>Enter output file: test-files/computerCompress.txt</p>	<p>computerCompress.txt is created in the test-files directory.</p> <p>computerCompress.txt contains exactly the same characters as compressedComputer.txt</p>	computerCompress.txt contains exactly the same characters as compressedComputer.txt

testDecompressLargeFile Author: Dr. Balik	Preconditions: Compression program started **HEADER** Enter C-ompress, D-ecompress, or Q-uit: D Enter input file: test-files/compressedComputer.txt Enter output file: test-files/decompressedComputer.txt	decompressedComputer.txt is created in the test-files directory. decompressedComputer.txt contains exactly the same characters as computer.txt	decompressedComputer.txt contains exactly the same characters as computer.txt
--	--	---	---