

CPSC 223C Project 1 – grep (from ed), due Wednesday, 25 Mar 2020

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Repository (print): NathanYoon/C-Project-1 .github.io

Finished	Not finished	Verify each of the following items with a corresponding checkmark Incorrectly marked items will incur a 5% penalty per item
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Researched <code>grep</code> on the Unix man page for <code>grep</code> (type <code>man grep</code>)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Researched <code>ed</code> on the Unix man page for <code>ed</code> (type <code>man ed</code> for <code>ed(1)</code>) game.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Researched regex (regular expressions), and have experimented with using them in <code>ed</code>. Read through in detail the source code for <code>ed</code> (<code>ed.c</code>).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Duplicated <code>ed.c</code> 's 1700+ lines of code, saved it as <code>grep.c</code> , and compiled it successfully.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Have used <code>gdb</code> or <code>lldb</code> debugger to step through code, and can demonstrate knowledge
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Have compressed source code to less than 600 lines, to have multiple expressions on the same line, to aid in understanding scope and function of each part of <code>ed</code> .
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Contrasted your version and Unix's <code>ed</code> editor, and confirmed <code>grep</code> runs identically.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Changed your version's main so the program's user interface acts like <code>grep</code> , not like <code>ed</code> .
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Identified the code unlikely to be associated with the <code>grep</code> functionality, commented it out, and confirmed the code's <code>grep</code> features still work correctly.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Used a header file to prototype all functions in <code>grep.h</code>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Removed all unnecessary variables and functions from <code>grep.c</code>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Confirmed the following functionality of your version of <code>grep</code> : <code>^Fred</code> search for Fred at beginning of line <code>Fred.\$</code> search for Fred. at end of line <code>'[FG]oo' *</code> search for Foo or Goo <code>'[0-9][0-9][0-9]'</code> search for a California license plate number
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<code>grep</code> can search for a string in one or more files
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<code>grep</code> prints all lines (in all search files) matching the regexp string
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<code>grep</code> prints a leading filename and colon on each line if multiple files are searched
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Final source code (uncompressed) is less than 700 lines (multiple declarations of same type on same line (e.g., <code>int *pa, *pb, c, *pd;</code>) is ok. If statements with one expression on one line, or functions with one line are ok (e.g. <code>int min(int a, int b) { return a < b ? a : b; }</code>)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Final source code (uncompressed) is less than 600 lines
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Final source code (uncompressed) is less than 500 lines
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Final source code (uncompressed) is less than 400 lines
<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Project directory has been pushed to the above GitHub repository
Your comments		