

CS 2413 Test 1

1. [10] You made a mistake in writing a program, `program.c`, and sometimes called a function, `deltaf()` with the wrong argument, `distance` instead of `speed`. The argument may or may not have spaces around it. Write a sed command which will change all occurrences of `deltaf(distance)` to `deltaf(speed)` This should modify the file `program.c` storing the result in `program2.c`. The command should be entirely on the command line.
2. [15] Write a single sed script which will do all of the following:
 - (a) reduce all white space (blanks and tabs) to a single space,
 - (b) delete all blank lines (no **non-blank** characters) and
 - (c) change, on all lines starting with `“/*”` and ending with `“*/”` (* is not meant as a wildcard here), any occurrence of `“perl”` to `“PERL”`.
3. [15] Write an awk script which adds the contents of the third field on every line that begins with `“Income”` and the second and fourth field on every line that begins with `“Interest”`. The third field of every line that ends with `“Expense”` must be subtracted. At the end of the input, the total should be printed in a line **similar** to:
`“Total = $12000.00”`
4. [15] Write a perl script that will read in lines from the files given on the command line and print out all comment lines without the leading `“/*”` and the trailing `“*/”`. Assume that all comment lines begin with `“/*”` and end with `“*/”`.
5. [15] You have several files which contain the pathnames of the root directories of source trees. Write a perl script that will print out a list of all TeX and Postscript files (*.tex and *.ps) which lie below the directories whose names are given in these files.
6. [20] Write a single perl script which will read from stdin and will
 - (a) reduce all white space (blanks and tabs) to a single space,
 - (b) delete all blank lines (no **non-blank** characters) and
 - (c) change, on all lines starting with `“/*”` and ending with `“*/”` (* is not meant as a wildcard here), any occurrence of `“perl”` to `“PERL”`.
7. [20] Write a Perl program, called `ileaf`, which will interleave the lines of a file with those of another file writing the result into a third file. If the files are a different length then the excess lines are written at the end. A sample invocation:
`ileaf file1 file2 outfile`

