

CS 2204: Homework #5

Assigned: October 18, 2005

Date Due: October 24, 2005, before class begins

1. (10 points) Write a **gawk** script to remove comments from a C/C++ program and print an uncommented version onto the standard output (screen). You may assume that the program given as input is syntactically correct. For your reference, a comment either (i) starts with `//` and everything on that line after that is treated as a comment, or (ii) starts with `/*` and ends with `*/` and everything in between is treated as a comment. Note that comments of the latter category can span multiple lines. Nesting of comments is not allowed, so that you cannot have a comment inside another comment. The script you write must take a valid C/C++ program and remove comments without changing the total number of lines in the file. If an entire line is a comment, just replace it with a blank (empty) line in your output. If only part of a line is a comment, you must print that line containing only the non-comment parts.

In answering this question, you might find the following **gawk** commands useful. Do a **man gawk** and acquaint yourself on how to use them.

- **gsub**: similar to **sed**'s command **s**.
- **next**: similar to **sed**'s command **b**.