

CS 2204: Homework #9

Assigned: December 2, 2005

Date Due: December 7, 2005, by email to your GTA (Use Subject: "CS 2204 HW9")

1. (10 points) Learn what the UNIX command `tee` does. Then explain how you can use this command to solve the following problem.

We want to setup a pipeline of data movement as follows. The source of the data is a program called `stockquotes`. Running it will continuously dump onto standard output precise up-to-the-second information about stock prices and market fluctuations. This output must then be processed by four different programs called `alpha`, `beta`, `gamma`, and `delta`, which will read from their standard input. It is especially critical that all of these programs receive the exact same input.

The following is not a solution:

```
stockquotes > file
alpha < file
beta < file
gamma < file
delta < file
```

because `stockquotes` is a continuously running program. Once started it will forever dump content onto the file and we certainly do not want to either wait for all the dumping to be over (which is never) or to physically store the content on the file system. Instead we want to channel it to the four programs which will gobble up the data as soon as they arrive.