

CS 2204: Homework #6

Assigned: October 24, 2005

Date Due: October 31, 2005, before class begins

1. (3 points) We know that when we run `cat` with multiple arguments, `cat` prints the contents of the first file (argument), followed by the contents of the second, and so on. Let us write our own `bash` script (call it `mycat`) that does the same thing and, in addition, prefaces each file's output with a line indicating the filename. For instance, when we run `mycat local.accounts national.accounts`, we get the following six-line output:

```
==> Below lines are taken from local.accounts <==
Adam 1234567 $67.5
Michael 4219485 $59.5
==> Below lines are taken from national.accounts <==
Kathleen 89 $1000.00
James 020 -$35.05
```

where `local.accounts` contains the two lines about 'Adam' and 'Michael,' and `national.accounts` contains the lines about 'Kathleen' and 'James.' Your `mycat` program must work for any arguments typed in, not just the example given here. You may assume that `mycat` will be invoked with at least one argument.

2. (4 points) Write a `bash` script called `ren` to take a set of files as arguments and renames any files that have spaces in them by replacing the space with a dot ('.'). Any file that does not contain spaces should be unchanged. For instance,

```
ren Hello\ World book
```

will rename `Hello World` to `Hello.World` and leave the file `book` unchanged (note that we have to escape the space, else the shell will think you are passing three arguments). You may assume that `ren` will be called with at least one argument.

3. (3 points) Write a `bash` script called `mycp` that takes two filenames as arguments and copies one over to the other. However, the semantics of `mycp` are different from the UNIX command `cp`. Typically, `cp a b` means that file `a` is to be copied over to `b`, over-writing what was already in `b`. Whereas `mycp a b` means that file `b` is to be copied over and over-write file `a`. Essentially, the placeholders for giving the source and destination files are reversed. You may assume that `mycp` will be called with exactly two arguments, both of which are filenames.