

Unix Tools  
Courant Institute of Mathematical Sciences  
Homework assignment 1  
Due: February 12, 2007

For each of the following questions, the answer should be given as a single sequence of piped Unix commands. Only the commands described in lect1-3.pdf should be used. The answers should be given in a single ascii file, which is what you will turn in.

1. Print the length of the absolute pathname of the current directory.
2. Print the number of files in your directory.
3. Use **find** to set the creation time of all the files in your directory to the current time.
4. Create an empty file **foo**. Use octal modes to make the file non-executable, and only readable and writeable by you.
5. Print the list of the users logged on with the number of times each is logged on.
6. Create a file in the current directory containing exactly lines 2000-3999 of **/etc/passwd**, each line preceded with its line number in the original file.
7. Use octal modes to make the file non-executable, and only readable and writeable by you.
8. Write the names of all users found in this file to **users** after replacing upper case letters into lower case ones.
9. Print the 10 most frequent first names in **users** preceded with their number of occurrences.
10. Sort **/etc/passwd** by the users' names and print the 15 last userids after removing all digits.