###### Experiment Number: 01

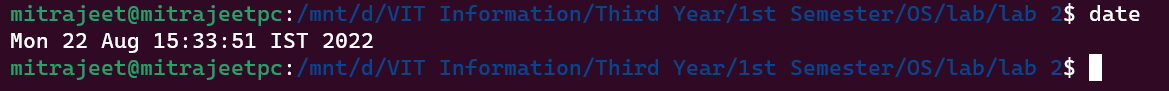
###### TITLE: Study Of Unix Commands

**OBJECTIVES:**

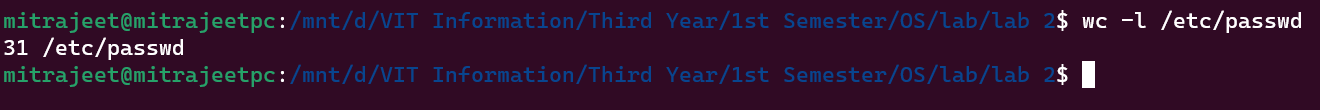
1. To understand how to use Unix commands.
2. To understand How and Why they are used in Shell Programming

**Problems to be solved in the lab:**

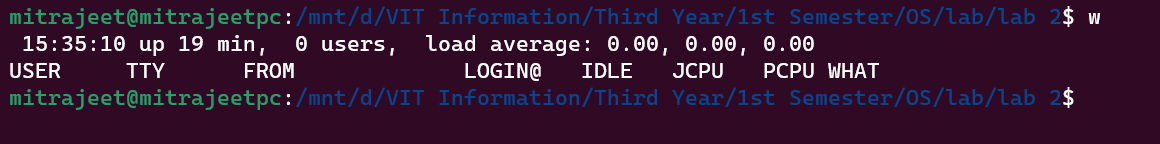
1. Change your password to a password you would like to use for the remainder of the semester.
2. Display the system’s date.



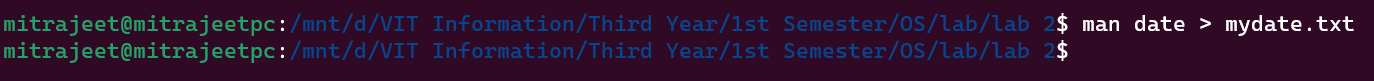
1. Count the number of lines in the /etc/passwd file.



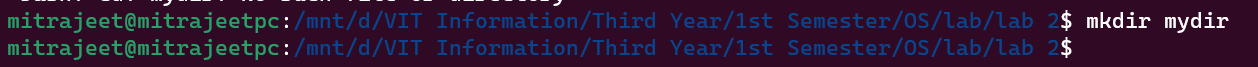
1. Find out who else is on the system.



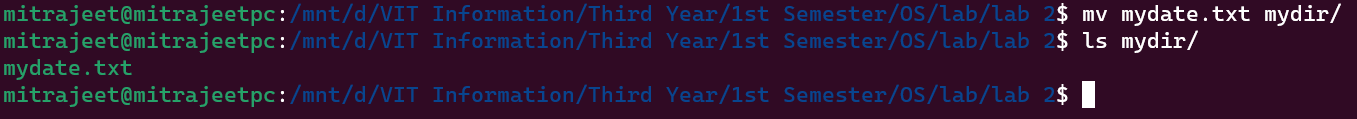
1. Direct the output of the man pages for the date command to a file named *mydate*.



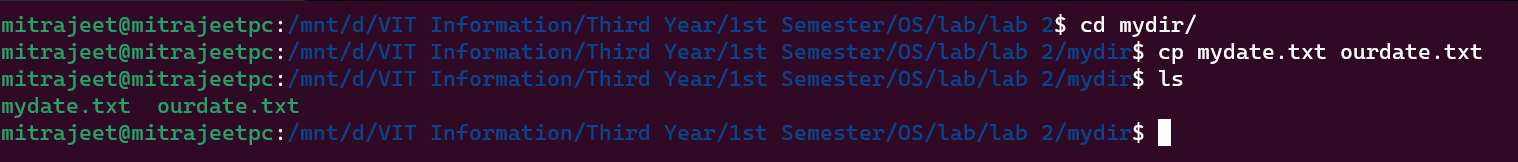
1. Create a subdirectory called *mydir*.



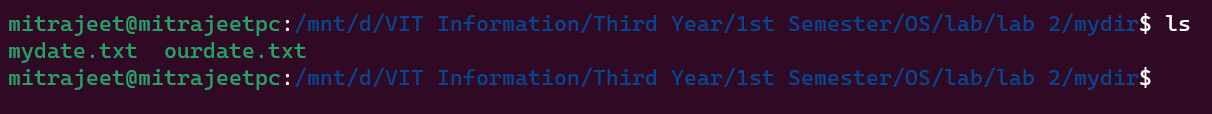
1. Move the file *mydate* into the new subdirectory.



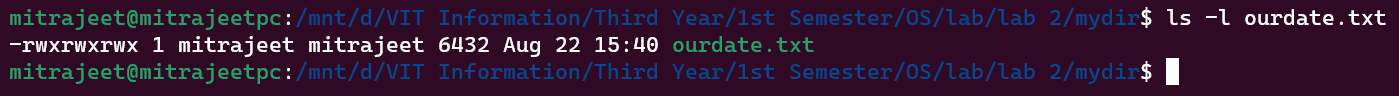
1. Go to the subdirectory *mydir* and copy the file *mydate* to a new file called *ourdate*



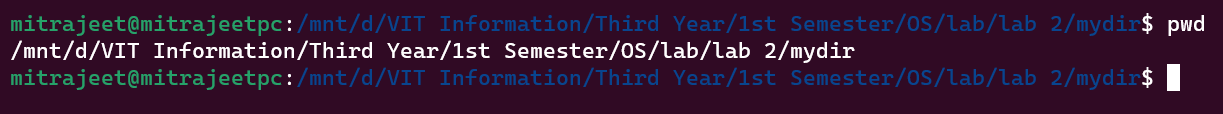
1. List the contents of *mydir*.



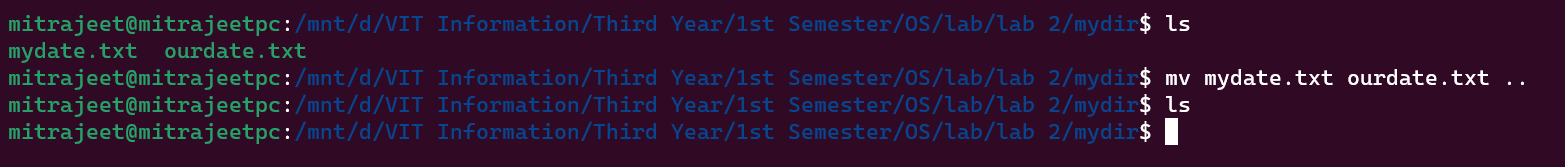
1. Do a long listing on the file *ourdate* and note the permissions.



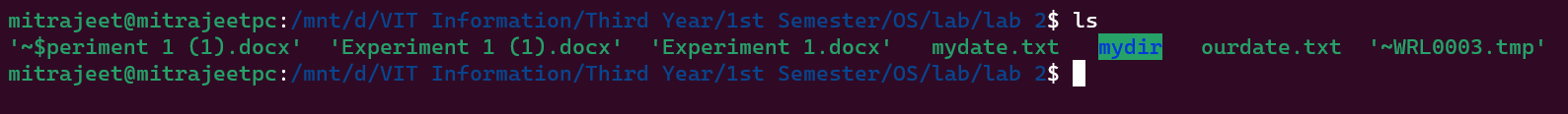
1. Display the name of the current directory starting from the root.



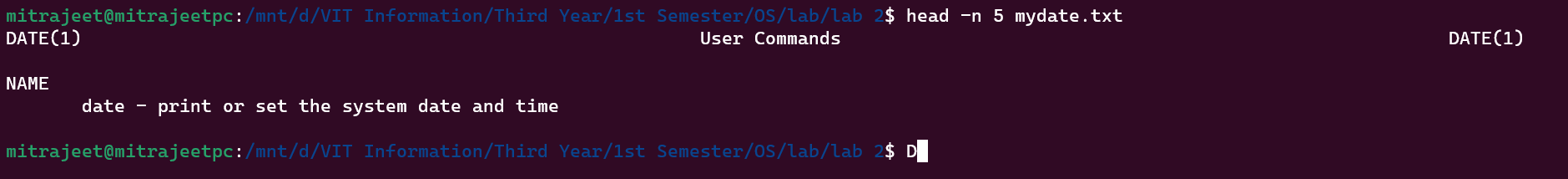
1. Move the files in the directory *mydir* back to the HOME directory.



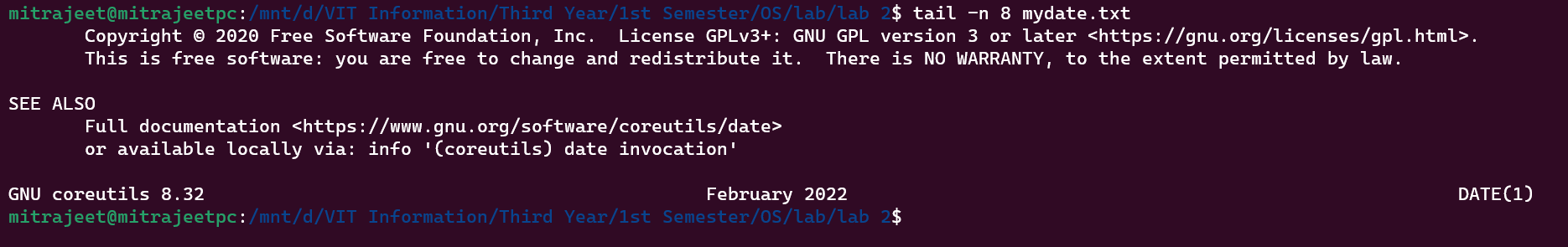
1. List all the files in your HOME directory.



1. Display the first 5 lines of *mydate*.



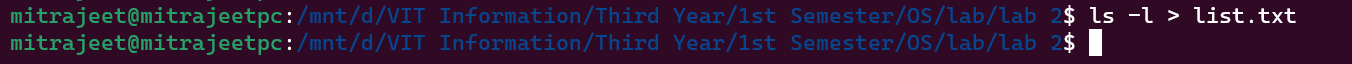
1. Display the last 8 lines of *mydate*.



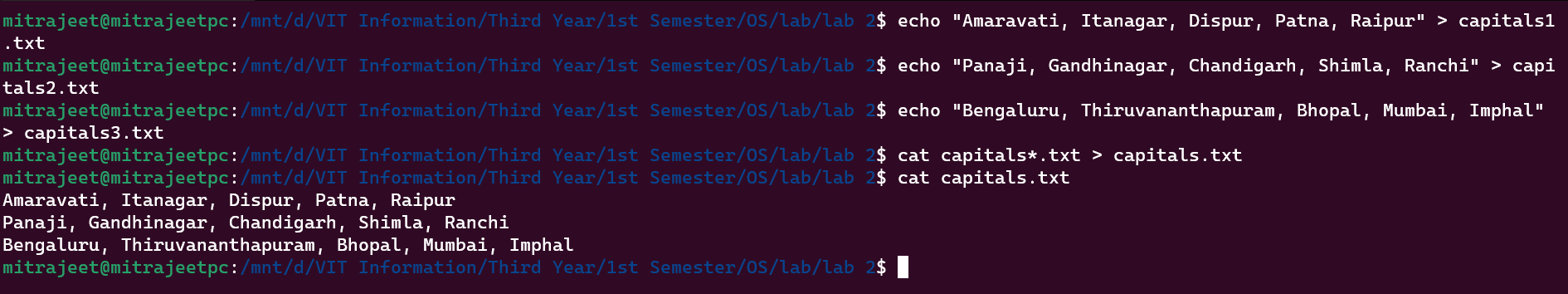
1. Remove the directory *mydir*.



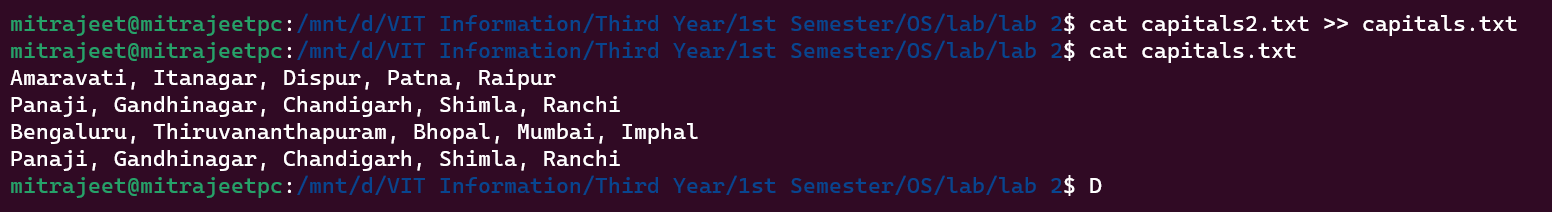
1. Redirect the output of the long listing of files to a file named *list*.



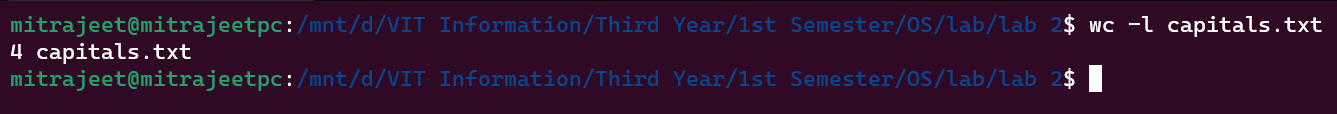
1. Select any 5 capitals of states in India and enter them in a file named *capitals1*. Choose 5 more capitals and enter them in a file named *capitals2*. Choose 5 more capitals and enter them in a file named *capitals3*. Concatenate all 3 files and redirect the output to a file named *capitals*.



1. Concatenate the file *capitals2* at the end of file *capitals*.



1. Redirect the file *capitals* as an input to the command “wc –l”.



1. Give read and write permissions to all users for the file *capitals*.
2. Give read permissions only to the owner of the file *capitals*. Open the file, make some changes and try to save it. What happens ?
3. Create an alias to concatenate the 3 files *capitals1*, *capitals2*, *capitals3* and redirect the output to a file named *capitals*. Activate the alias and make it run.
4. What are the environment variables PATH, HOME and TERM set to on your terminal ?
5. Find out the number of times the string “the” appears in the file *mydate*.
6. Find out the line numbers on which the string “date” exists in *mydate*.
7. Print all lines of *mydate* except those that have the letter “i” in them.
8. Create the file *monotonic* as follows:

^a?b?b?c?…………..x?y?z$

Run the egrep command for *monotonic* against /usr/dict/words and search for all 4 letter words.

1. List 5 states in north east India in a file *mystates*. List their corresponding capitals in a file *mycapitals*. Use the *paste* command to join the 2 files.
2. Use the *cut* command to print the 1st and 3rd columns of the /etc/passwd file for all students in this class.
3. Count the number of people logged in and also trap the users in a file using the *tee* command.

**APPLICATIONS**

1. To enable the user to communicate with the kernel through the command interpreter.
2. Useful in Shell Programming

FAQs

* 1. What is a pipe?
  2. What is a filter?
  3. What is the purpose of the grep command?
  4. How does input output redirection take place?
  5. What is an alias?