

National University of Computer and Emerging Sciences



Laboratory Manual # 01 Operating Systems

Course Instructor	Mubashar Hussain
Lab Instructor	Muhammad Hashir Mohsineen
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Instructions:

- Submit a world/LibreOffice file (for Q1 and Q2) containing screenshots of terminal commands
- For Q3 and 4 .c file named as your roll number and question number.
- In case of any explanation you can add a multiline comment.

Objectives:

- Practice basic Linux commands
- Executing code in Linux
- Develop small program in C
- Command line arguments in C

1. Exercise:

[5]

Practice Linux commands given in the attached file.

2. Exercise:

[5]

The task has the following parts

- Create a directory inside your home directory named os_391.
- Download file hw1.zip and save it into your new os_391 directory. (Use command to download) `wget https://courses.cs.washington.edu/courses/cse391/21sp/homework/hw1/hw1.zip` is
- Unzip the hw1.zip file's contents into your hw1 folder.
- If you did everything correctly, you should now have several files and directories within a hw1 directory, such as java/, website/, animals.txt, Burrot.java, numbers.txt, and song1.txt
- List the files in the current directory, in "long listing format".
- List all files, including hidden files, in the /var directory.
- Rename the file Burrot.java to Borat.java
- Delete the files diff.html and diff.css. Note that your answer must be a single command and not multiple commands.
- The diff command outputs the differences between two files. Output the differences between lyrics.txt and lyrics2.txt (take screenshot)
- From the hw1 directory, how do you open animals.txt in the text editor of your choice? (hint: Use nano)
- Bring the cursor to the end of the file and append your roll number along the name there and save the contents of your file. Exit the editor and come back to the terminal.
- Compressed the modified contents of the folder into new folder (named YOUR_ROLL_NUMBER__FIRST__NAME.zip)

Make a world/ LibreOffice file and paste your screenshots (of terminal commands) after completing the above steps.

3. Exercise:

[5]

Write a C program that accepts numbers as command line arguments and multiplies them together. If the program receives no arguments or any non-numeric argument, it should display an error message.

Input: ./program 2 3 4

Output: Product: 24

(Method to run cpp file and handle command line args is given in the attached file)

4. Exercise:

[5]

Write a C program that accepts strings as command line arguments and concatenates them into a single string. The program should output the concatenated result without any spaces in between.

Input: ./program this is a test

Output: thisisatest
