CSL503: Computer Systems Engineering

Lab-2: Practice Problems (Linux Commands Implementation)

Date: 13-August-2024

Instructions:
1. You must solve the below problems only on the Linux terminal to make yourself familiar with linux commands and start getting good practice.
2. Complete the lab hour and submit it through canvas.
3. Prepare all your solution files in a zip file and name it as <ROLLNO.zip> and submit on canvas.

Problems:

1. Linux has a **date** command to print the date in a default format. Find out a way to format the bash **date** command to give the output as given below:
   Tue Mar 5 09:58:21 PM IST 2019 [Hint: use man page]
2. Implement the following linux commands using C language. You should create an executable as listed below.

Executable Name	Linux Command Name	Semantics
cat	cat <file>	Prints the contents of the file <file>
cp	cp <dst> <src>	Copies the contents of the file <src> to <dst> note that the order is different from that of traditional cp command
head	head <num> <file>	Lists the top <num> lines of the the file <file>
tail	tail <num> <file>	Lists the bottom <num> lines of the file <file>
grep	grep <string> <file>	Searches for the <string> in the <file> and list the whole line along with line number matching the <string>