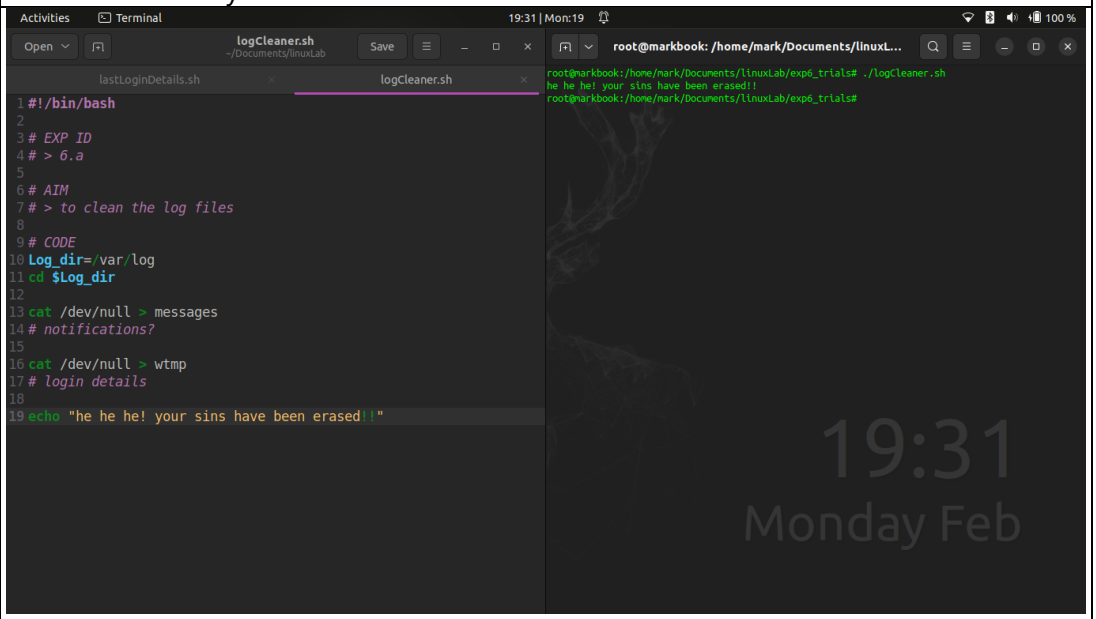
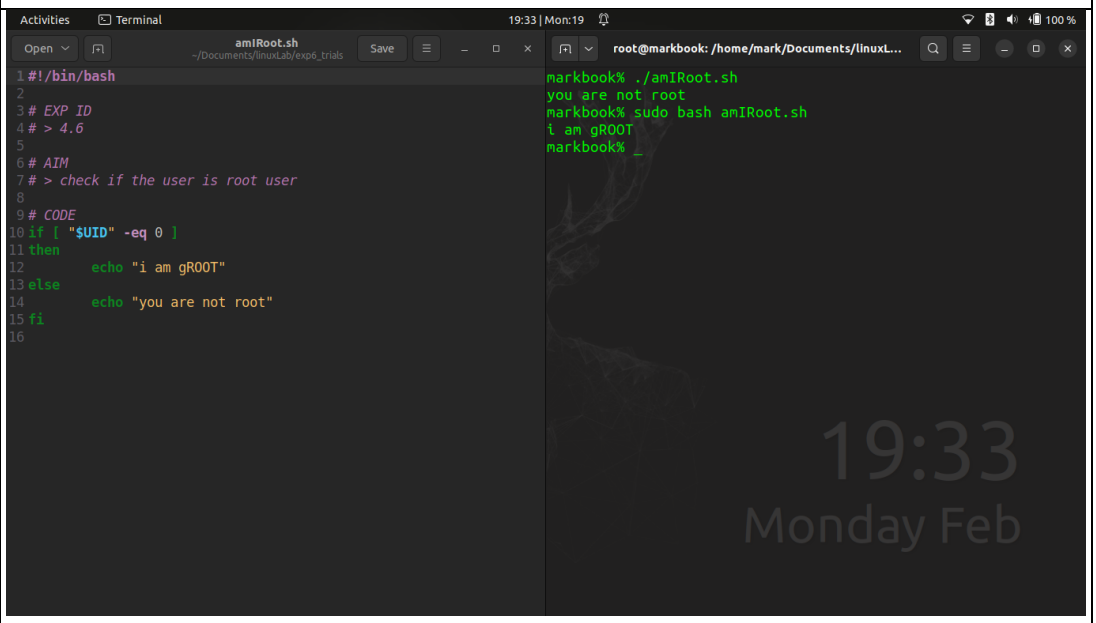
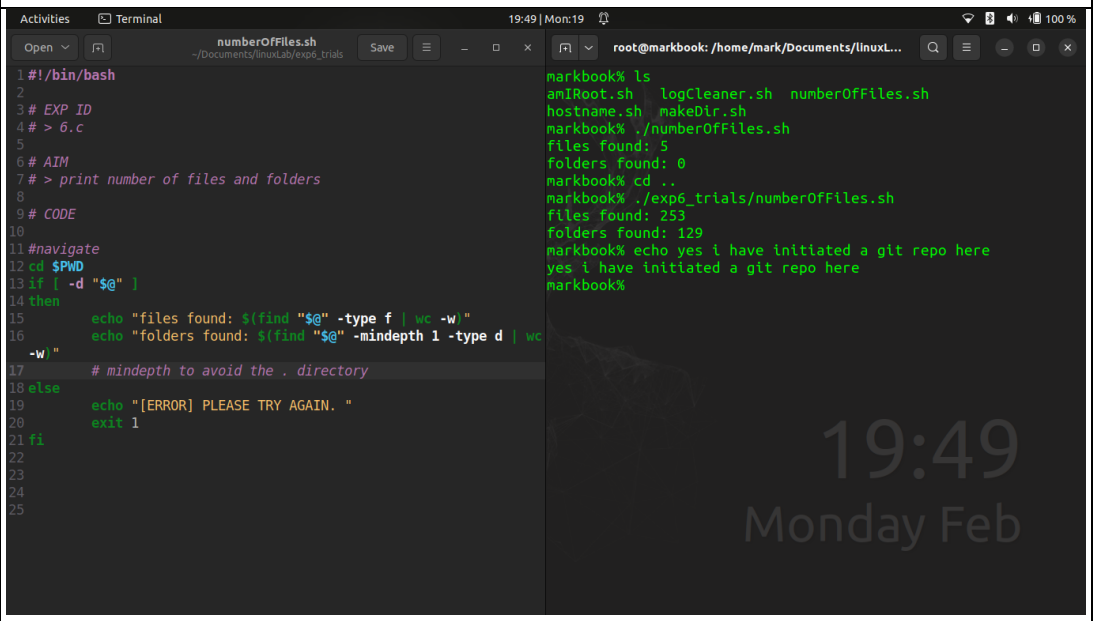
	Experiment No : 6 **Date :**
Title	**Delete all log files, Create Directories, Check user, print file and folder**
Aim	**a.Write a shell script to delete all log files present inside your var/log directory** **b. Write script to check if user is root user** **c. Write script to print number of files and folders** **d. Write Script to Create Directories**
Hardware Requirement	Personal Computer
Software Requirement	Linux Operating System(Ubuntu 20.04) , Shell-Interpreter Nano or Vi or Vim or gedit text editor
Theory	The log file is a file that records either events that occur in an operating system or other software runs. In here, the Linux servers have log files which keep messages about the server, including the kernel, services, and applications running on it. And the log files are located at the /var/log directory. Mainly there are **four types of log files generated** in a Linux based environment and they are: • Application Logs. • Event Logs. • Service Logs. • System Logs. **Uses of Linux log files** From the log files, one can observe and find the details on server performance, security, error messages, and underlying issues. Hence any issue that the server is undergoing one can get the clue by detailed view on the log files. Hence by reviewing the log files one can solve the existing issues and can take precautions for the issues that may cause in future! Log Files can also be viewed with following command • Viewing logs with less • Viewing logs with dmesg • Viewing logs with tail

	(ref : https://www.linux.com/topic/desktop/viewing-linux-logs-command-line/)
statement	**a.Write a shell script to delete all log files present inside your var/log directory**

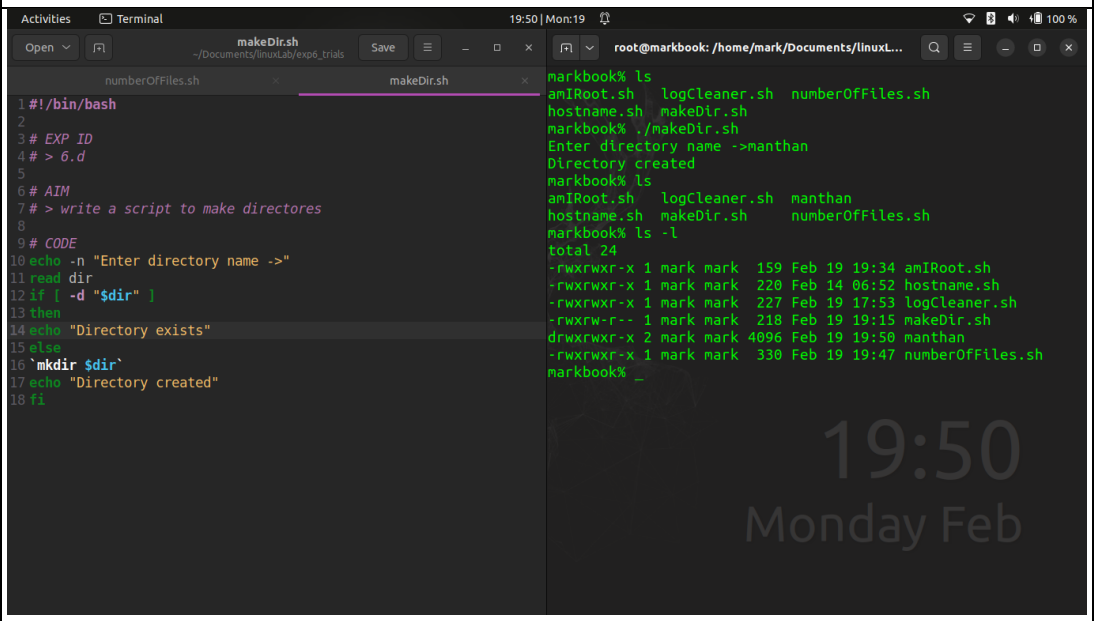
Shell Script	#!/bin/bash
	
	# EXP ID
	# > 6.a
	
	# AIM
	# > to clean the log files
	
	# CODE
	Log_dir=/var/log
	cd $Log_dir
	
	cat /dev/null > messages
	# notifications?
	
	cat /dev/null > wtmp
	# login details
	
	echo "he he he! your sins have been erased!!"

Output	

statement	**b. Write script to check if user is root user**
Shell Script	#!/bin/bash # EXP ID # > 4.6 # AIM # > check if the user is root user # CODE if ["$UID" -eq 0] then echo "i am gROOT" else echo "you are not root" fi
Output	
statement	**c. Write script to print number of files and folders**
Shell Script	#!/bin/bash # EXP ID # > 6.c

	# AIM # > print number of files and folders # CODE #navigate cd $PWD if [-d "$@"] then echo "files found: $(find "$@" -type f | wc -w)" echo "folders found: $(find "$@" -mindepth 1 -type d | wc -w)" # mindepth to avoid the . directory else echo "[ERROR] PLEASE TRY AGAIN. " exit 1 fi
Output	
statement	**d. Write Script to Create Directories**
Shell Script	#!/bin/bash # EXP ID # > 6.d

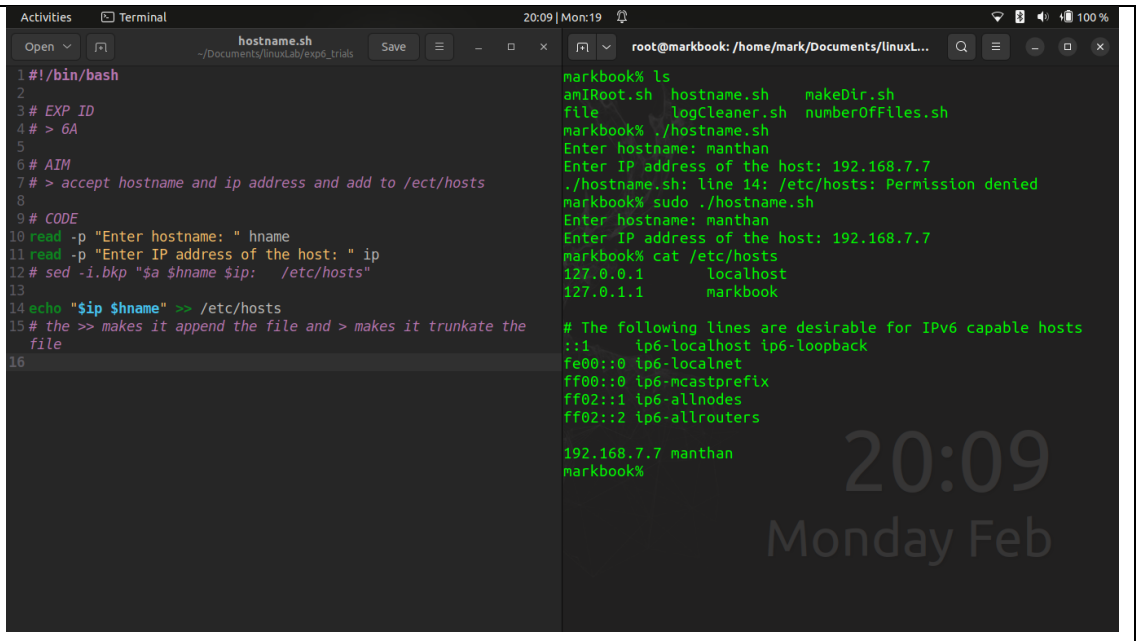
	# AIM
	# > write a script to make directores
	
	# CODE
	echo -n "Enter directory name ->"
	read dir
	if [-d "$dir"]
	then
	echo "Directory exists"
	else
	`mkdir $dir`
	echo "Directory created"
	fi

Output	
Conclusion	Learned about log files and the concept of root user in linux.
Signature	

Grade	
Date	

	Experiment No : 6A
Title	**Accepts the hostname and IP address**
Aim	**Write a script that accepts the hostname and IP address as command-line arguments and adds them to the /etc/hosts file.**
Hardware Requirement	Personal Computer
Software Requirement	Linux Operating System(Ubuntu 20.04) , Shell-Interpreter Nano or Vi or Vim or gedit text editor

Theory	**HostName** A host name is a unique name or label assigned to any device that is connected to a specific computer network. It facilitates the differentiation of different machines or devices connected to the Internet, a network and/or both. Allotted and assigned host names are based on the naming system used. **IPaddress** An IP address, or Internet Protocol address, is a series of numbers that identifies any device on a network. Computers use IP addresses to communicate with each other both over the internet as well as on other networks. **Sed Command** Sed command or Stream Editor is very powerful utility offered by Linux/Unix systems. It is mainly used for text substitution , find & replace but it can also perform other text manipulations like insertion, deletion, search etc. With SED, we can edit complete files without actually having to open it.
Shell Script	#!/bin/bash # EXP ID # > 6A # AIM # > accept hostname and ip address and add to /ect/hosts # CODE read -p "Enter hostname: " hname read -p "Enter IP address of the host: " ip # sed -i.bkp "$a $hname $ip: /etc/hosts" echo "$ip $hname" >> /etc/hosts # the >> makes it append the file and > makes it trunkate the file

Output	
Conclusion	Learned to add server adress in /etc/host file in linux.
Signature	

Date	
Grade	