St. JOSEPH'S GROUP OF INSTITUTIONS
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aws

Placement Empowerment Program

Cloud Computing and DevOps Centre

60 Days of DevOps Challenge

Day 2: Linux Shell Scripting & Automation

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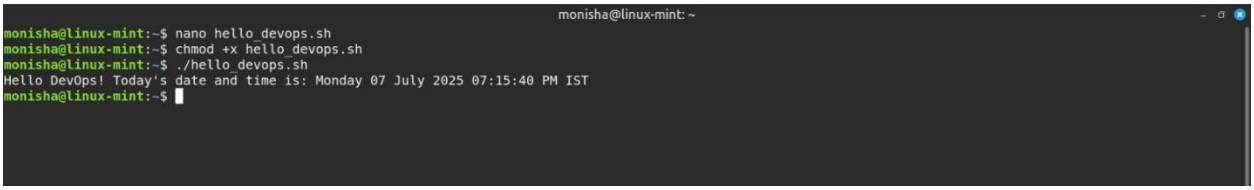
This Proof of Concept (PoC) demonstrates the Linux Basics Shell Scripting, Managing Processes, Using Package Managers, Basic Networking Commands and Editing Configuration Files.

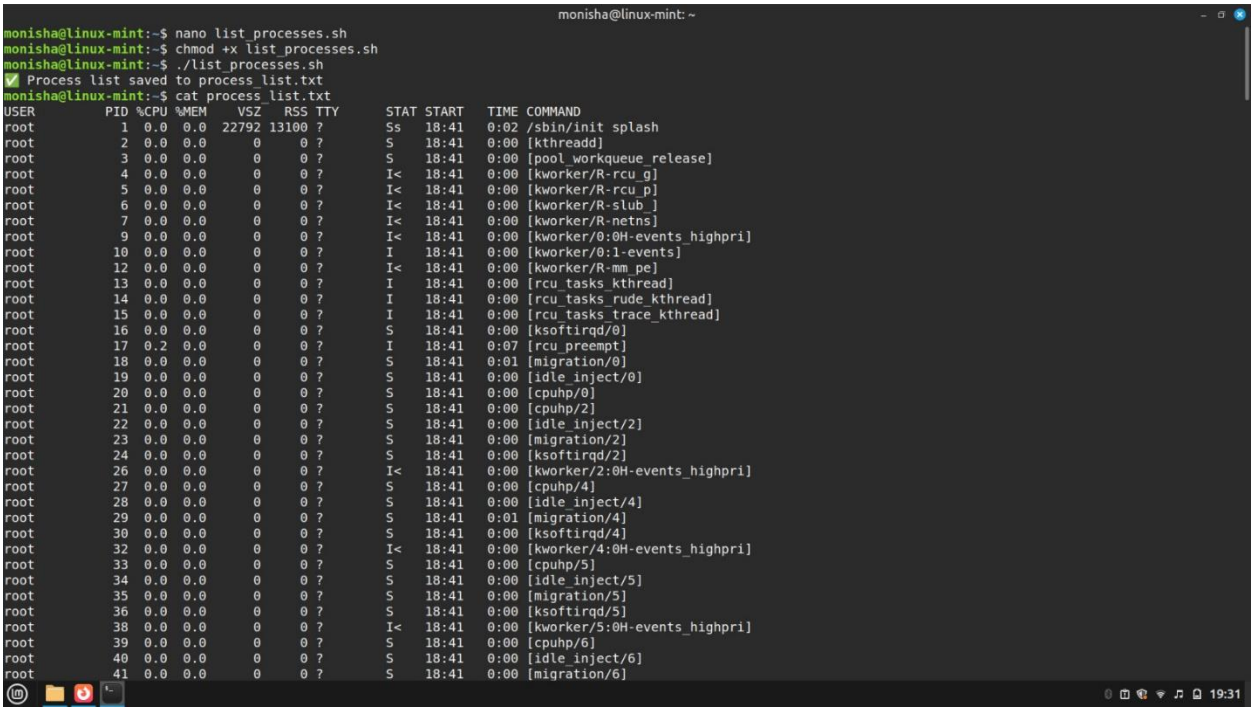
Challenge 1: Write a simple Bash script that prints “Hello DevOps” along with the current date and time.



Challenge 2: Create a script that checks if a website (e.g., https://www.learnxops.com) is reachable using curl or ping. Print a success or failure message.

Challenge 3: Write a script that takes a filename as an argument, checks if it exists, and prints the content of the file accordingly.

Challenge 4: Create a script that lists all running processes and writes the output to a file named process_list.txt.



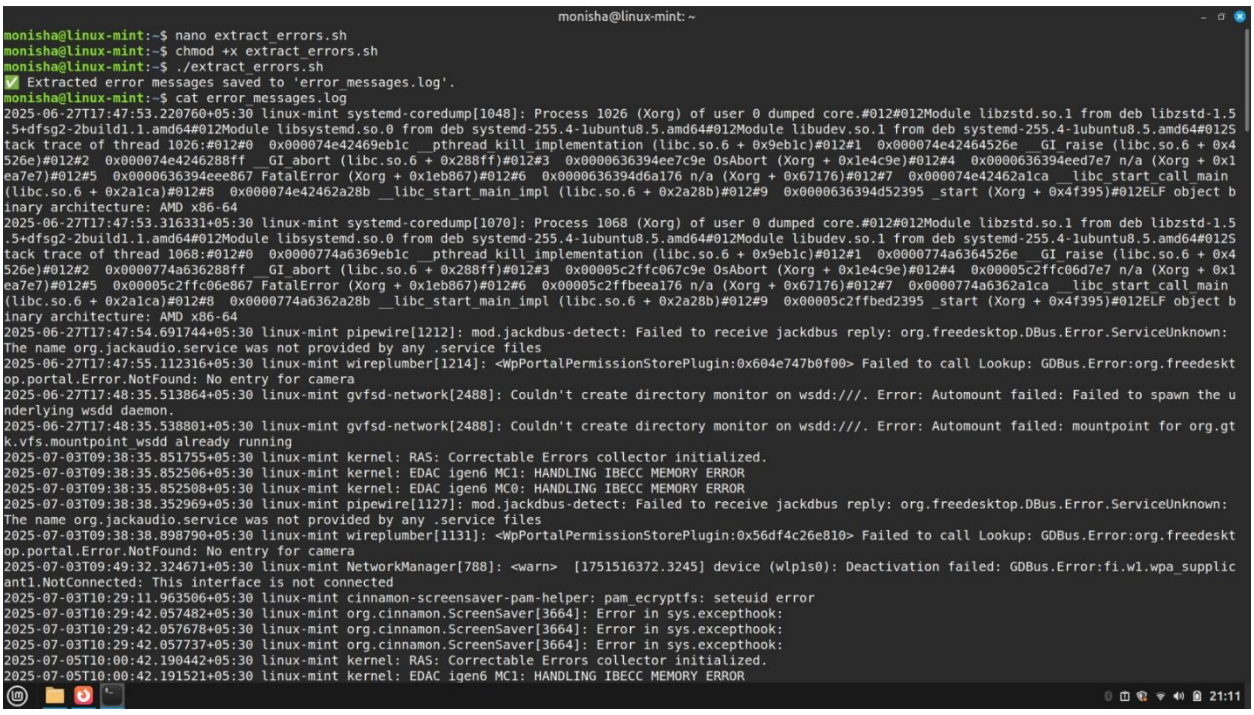
Challenge 5: Write a script that installs multiple packages at once (e.g., git, vim, curl). The script should check if each package is already installed before attempting installation.

Challenge 6: Create a script that monitors CPU and memory usage every 5 seconds and logs the results to a file.

Challenge 7: Write a script that automatically deletes log files older than 7 days from /var/log.

Challenge 8 : Automate user account creation – Write a script that takes the username as an argument, checks, if the user exists, gives the message "user already exists" else creates a new user, adds it to a "devops" group, and sets up a default home directory.

Challenge 9 : Use awk or sed in a script to process a log file and extract only error messages.



Challenge 10 : Set up a cron job that runs a script to back up (zip/tar) a directory daily.