SOME MORE USEFUL LINUX COMMANDS

Show memory usage in human-readable format

ps aux --sort -%mem | head # List top processes by memory usage

Display real-time system resource usage

• ping chatgpt.com # Check network connectivity to chatgpt.com

• nslookup google.com # Get DNS information for google.com

 ifconfig # Show network interface details (deprecated, use 'ip a')

• curl http://google.com # Fetch webpage headers from Google

Is -lrt # List files sorted by modification time (oldest first)

 less a.txt # View the contents of a.txt

 stat a.txt # Display detailed information about a.txt

Show disk space usage in human-readable format

- sudo apt install stress # Install the "stress" tool for CPU stress testing
- # Update package lists sudo apt update
- sudo apt search firefox # Search for Firefox in package manager
- sudo apt search python # Search for Python in package manager
- # List all installed packages dpkg -l
- dpkg -l | grep python # List installed Python-related packages
- dpkg -l | grep mysql # List installed MySQL-related packages
- dpkg -l | grep stress # Check if "stress" package is installed
 sudo apt upgrade # Upgrade installed packages
- sudo apt remove stress # Remove the "stress" package
- To add users:

sudo adduser user_name

su - user name

- sudo userdel -r username # Delete user 'username' and remove their home directory
- sudo useradd -m username1 # Create a new user 'username1' with a home directory
- sudo passwd username1 # Set a password for the user 'username1'
- sudo adduser sindhu # Add a new user 'sindhu'
- sudo su -u sindhu # Switch to user 'sindhu' (incorrect syntax, should be `su sindhu`)
- su sindhu # Switch to user 'sindhu'
- finger sindhutry # Get user information for 'sindhutry'
- Is -Irt # List files in the current directory sorted by modification time
- cd /home # Change directory to '/home'
- Is -Irt #List files in '/home' sorted by modification time
- sudo mkdir sindhutrying # Create a directory 'sindhutrying' in '/home' with sudo
- Is -Irt # List files in '/home' again
- chmod 777 sindhutry # Give full permissions to 'sindhutry' (not recommended for security
- chmod 777 sindhutrying/ # Give full permissions to 'sindhutrying' directory
- sudo chmod 777 sindhutrying/ # Ensure full permissions with sudo
- finger sindhutrying # Get user information for 'sindhutrying'
- finger root # Get user information for 'root'
- finger rootsindhu # Get user information for 'rootsindhu'
- man finger # Show the manual page for the 'finger' command
- sudo usermod -a -G c406cohort sindhu
- trying # Add user 'sindhutrying' to group 'c406cohort'
- sudo groupadd c406cohort # Create a new group 'c406cohort'
- sudo usermod -a -G c406cohort sindhutrying # Ensure user 'sindhutrying' is added to 'c406cohort'
- history # Show command history
- cd /etc/ # Change directory to '/etc/'
- Is -Irt # List files in '/etc/' sorted by modification time
- sudo cat group # Display the contents of the 'group' file with sudo
- cd /home # Change directory to '/home'
- sudo mkdir -p /home/grouptry/sindhu/a # Create directory '/home/grouptry/sindhu/a' with sudo
- sudo chmod 400 /home/grouptry/sindhu/a # Set read-only permission (owner only) for 'a'
- sudo chmod 400 /home/grouptry # Set read-only permission (owner only) for 'grouptry'
- sudo chgrp c406cohort /home/grouptry # Change group ownership of 'grouptry' to 'c406cohort'
- sudo chgrp c406cohort /home/grouptry/sindhu/a # Change group ownership of 'a' to 'c406cohort'
- Is -Irt # List files in '/home/grouptry' sorted by modification time
- chmod 040 grouptry/ # Set strict read-only permission for 'grouptry'
- sudo chmod 040 grouptry/ # Ensure strict read-only permission with sudo
- sudo chmod 2775 grouptry/ # Set permissions with setgid (ensuring new files inherit group
- sudo chmod g+s grouptry/sindhu/a # Set the setgid bit so new files in 'a' inherit the group
- sudo chmod 400 /home/grouptry # Set read-only permission (owner only) for 'grouptry'
- sudo chgrp c406cohort /home/grouptry # Change group ownership of 'grouptry' to 'c406cohort'
- sudo chgrp c406cohort /home/grouptry/sindhu/a # Change group ownership of 'a' to

- Is -Irt # List files in '/home/grouptry' sorted by modification time
- chmod 040 grouptry/ # Set strict read-only permission for 'grouptry
- sudo chmod 040 grouptry/ # Ensure strict read-only permission with sudo
- sudo chmod 2775 grouptry/ # Set permissions with setgid (ensuring new files inherit group ownership)
- history # Show command history
- sudo chmod g+s grouptry/sindhu/a # Ensure setgid bit is applied to 'a'
- cd grouptry/sindhu # Change directory to 'grouptry/sindhu'
- Is -Irt # List files sorted by modification time
- vi alpha.txt # Open 'alpha.txt' in the vi editor
- sudo vi alpha.txt # Open 'alpha.txt' in vi with sudo privileges
- Is -Irt # List files sorted by modification time
- ssh-keygen -t rsa -b 4096 -C "gudlasindhuja@gmail.com" # Generate a 4096-bit RSA SSH key with the specified email as a label
- cd .ssh/ # Change directory to the .ssh folder (where SSH keys are stored)
- Is -Irt # List files in .ssh directory in long format, sorted by modification time (oldest first)
- less id rsa.pub # View the public SSH key
- less id_rsa # View the private SSH key (should be kept secret)
- cd # Change directory back to the home directory
- eval "{ssh-agent -s}" # Start the SSH agent (incorrect syntax, should be `eval \$(ssh-agent -s)`)
- sudo apt install openssh-client # Install OpenSSH client (if not already installed)
- eval "{ssh-agent -s}" # Attempt to start the SSH agent again (incorrect syntax)
- ssh-keygen -t ed25519 -C "gudlasindhuja@gmail.com" # Generate a secure Ed25519 SSH key with the specified email as a label
- eval "\$(ssh-agents -s)" # Incorrect command (should be `eval "\$(ssh-agent -s)"`)
- eval "\$(ssh-agent -s)" # Correct way to start the SSH agent
- ssh-add ~/.ssh/id_ed25519 # Add the newly generated Ed25519 SSH key to the SSH agent
- cat ~/.ssh/id ed25519.pub # Display the public SSH key (to add it to services like GitHub)
- ssh -T git@github.com # Test the SSH connection to GitHub
- git clone git@github.com:gsindhuja1311/c406firstproject.git # Clone the specified GitHub repository via SSH
- Is -Irt #List files in the current directory in long format, sorted by modification time (oldest first)
- gistory # Likely a typo or an alias (check if it's a valid command)
- history # Display the command history
- su jineshtry # Switch to the user 'jineshtry' (requires the user's password)
- Ipg # Show the status of the print gueue
- dmesg # Display system messages (useful for checking kernel logs)
- dmesg | tail -50 # Show the last 50 lines of kernel logs
- dmesg | grep "USB" # Search for USB-related messages in the kernel log
- history # Display the command history
- iperf # Run iperf (if installed) for network performance testing
- sudo apt install iperf # Install iperf (if not already installed)
- iperf # Run iperf (after installation)
- iperf -s # Start iperf in server mode
- iperf -s -f M # Start iperf server and display bandwidth in megabytes per second (MBps)
- sudo tcpdump -i any # Capture and display network packets on any interface (requires sudo)
- telnet google.com # Try to connect to google.com via telnet (may fail if telnet is not enabled)
- $\bullet\,$ dig google.com # Query DNS information for google.com using the 'dig' tool
- history # Display the command history again

To install jenkins:

- # Update package lists
 - sudo apt update
- # Install Java (required for Jenkins)
 - sudo apt install fontconfig openjdk-17-jre -y
- # Install Jenkins
 - sudo apt install jenkins -y
 - sudo cat /var/lib/jenkins/secrets/initialAdminPassword
- # Add Jenkins user to Docker group (so Jenkins can run Docker commands)
 - sudo usermod -aG docker jenkins
- · # Restart Jenkins to apply group changes
 - sudo systemctl restart jenkins
- http://localhost:8080/login?from=%2Fsudo systemctl start jenkins
- sudo systemctl enable jenkins
- sudo systemctl status jenkins

