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| --- | --- | --- | --- |
| No | Task | Commands | Output |
| 1 | Open your terminal and run | tree -L 2 / | The tree command displays files and directory structure in tree(branches) format  The -L is part of the syntax; 2(or any number) describes the level of depth; / specifies the root directory.  Note: you may be required to install the tree command:  ***sudo apt install tree*** |
|  | What directories exist directly under **/**? |  | The root directory |
|  | What is the purpose of these directories?  */etc, /home, /var, /usr, and /tmp?* |  | /etc = configuration files  /home = user personal files and settings  /var = variable data (logs, mail, dbs)  /usr = system software and libraries  /tmp = temporary files (auto-deleted) |
| 2 | Create a new directory structure to mimic a project: | *mkdir -p ~/project/{docs,scripts,output}* | Makes a directory called **project**, with *docs, scripts, output* as subdirectories… all done in one script. It can be nested to create more subdirectories |
|  | Create a file inside the docs. | *echo "This is a project documentation file." > /project/docs/README.txt* | Create a file called README.txt (case sensitive) /home/emmy/project/docs |
| 3 | Display the contents of README.txt | *cat /etc/os-release* | This is a system file that contains **information about the operating system**. |
|  | Identify your Linux distribution and identify the name and version of your Linux distro. | *cat /etc/os-release* | Name: Ubuntu  Version: 24.04.2 |
|  | What Linux kernel version are you running? | uname -r | 6.8.0-63-generic |
| 4 | Run each of the following and note down the output and purpose. |  |  |
|  |  | lscpu | Displays cpu architecture |
|  |  | free -h | Displays memory usage statistics |
|  |  | df -h | Displays disk space usage for all mounted filesystems |
|  |  | top or htop | Displays system processes/colourfully displays system processes |
|  |  | ip a or hostname -I | Shows detailed information about all network interfaces on your system  IP address assigned to your machine |
|  |  | uptime | How long a system has been running |
|  |  | who or w | Information about user currently logged in. |