**Linux command**

1. **pwd**
   * **Purpose**: Displays the current directory's full path.
   * **Example**:  
     pwd  
     Output: /home/user
2. **ls**
   * **Purpose**: Lists files and directories in the current directory.
   * **Example**:  
     ls  
     Use ls -a to include hidden files or ls -l for detailed information.
3. **cd**
   * **Purpose**: Change the current working directory.
   * **Example**:  
     cd /home/user/documents  
     Moves into the specified directory.
4. **mkdir**
   * **Purpose**: Creates a new directory.
   * **Example**:  
     mkdir my\_folder  
     Creates a directory named my\_folder.
5. **rmdir**
   * **Purpose**: Deletes an empty directory.
   * **Example**:  
     rmdir my\_folder  
     Removes the directory my\_folder.
6. **rm**
   * **Purpose**: Deletes files or directories.
   * **Example**:  
     rm file.txt  
     Deletes file.txt. Use rm -r folder\_name to remove directories recursively.
7. **touch**
   * **Purpose**: Creates an empty file or updates the timestamp of an existing file.
   * **Example**:  
     touch newfile.txt  
     Creates a blank file named newfile.txt.
8. **cp**
   * **Purpose**: Copies files or directories.
   * **Example**:  
     cp source.txt destination.txt  
     Copies source.txt to destination.txt.
9. **mv**
   * **Purpose**: Moves or renames files/directories.
   * **Example**:  
     mv old\_name.txt new\_name.txt  
     Renames the file old\_name.txt to new\_name.txt.
10. **cat**
    * **Purpose**: Displays the content of a file.
    * **Example**:  
      cat file.txt  
      Prints the content of file.txt to the terminal.
11. **nano**
    * **Purpose**: Opens a file in the Nano text editor.
    * **Example**:  
      nano file.txt  
      Opens file.txt for editing.
12. **echo**
    * **Purpose**: Prints text or variables to the terminal.
    * **Example**:  
      echo "Hello, World!"  
      Displays: Hello, World!.
13. **find**
    * **Purpose**: Searches for files or directories.
    * **Example**:  
      find /home -name file.txt  
      Searches for file.txt in /home.
14. **grep**
    * **Purpose**: Searches for text patterns in files.
    * **Example**:  
      grep "text" file.txt  
      Finds and displays lines containing "text" in file.txt.
15. **chmod**
    * **Purpose**: Changes file or directory permissions.
    * **Example**:  
      chmod 755 script.sh  
      Assigns read, write, and execute permissions to the owner.
16. **df**
    * **Purpose**: Displays disk space usage.
    * **Example**:  
      df -h  
      Shows disk space in a human-readable format.
17. **du**
    * **Purpose**: Displays the size of directories or files.
    * **Example**:  
      du -sh /home/user  
      Displays the size of the /home/user directory.
18. **ps**
    * **Purpose**: Lists running processes.
    * **Example**:  
      ps -aux  
      Shows detailed information about all running processes.
19. **top**
    * **Purpose**: Monitors real-time system resource usage.
    * **Example**:  
      top  
      Displays CPU and memory usage dynamically.
20. **kill**
    * **Purpose**: Terminates processes by ID.
    * **Example**:  
      kill 1234  
      Kills the process with ID 1234.
21. **tar**
    * **Purpose**: Archives files or extracts archives.
    * **Example**:  
      tar -czvf archive.tar.gz file1 file2  
      Creates a compressed archive of file1 and file2.
22. **zip**
    * **Purpose**: Compresses files into a zip archive.
    * **Example**:  
      zip archive.zip file.txt  
      Creates a zip file archive.zip containing file.txt.
23. **unzip**
    * **Purpose**: Extracts files from a zip archive.
    * **Example**:  
      unzip archive.zip  
      Extracts the contents of archive.zip.
24. **wget**
    * **Purpose**: Downloads files from the internet.
    * **Example**:  
      wget https://example.com/file.txt  
      Downloads file.txt from the specified URL.
25. **curl**
    * **Purpose**: Transfers data from or to a server.
    * **Example**:  
      curl https://example.com  
      Fetches the contents of the URL.
26. **ifconfig**
    * **Purpose**: Displays or configures network interfaces.
    * **Example**:  
      ifconfig  
      Shows IP and network details.
27. **ping**
    * **Purpose**: Tests network connectivity to a host.
    * **Example**:  
      ping google.com  
      Sends ICMP requests to google.com.
28. **netstat**
    * **Purpose**: Displays network connections and statistics.
    * **Example**:  
      netstat -tuln  
      Lists active listening ports.
29. **ssh**
    * **Purpose**: Connects to a remote machine securely.
    * **Example**:  
      ssh user@192.168.1.1  
      Logs into the remote host.
30. **man**
    * **Purpose**: Displays the manual for a command.
    * **Example**:  
      man ls  
      Shows the manual page for the ls command.
31. **alias**
    * **Purpose**: Creates shortcuts for commands.
    * **Example**:  
      alias ll='ls -la'  
      Sets ll as a shortcut for ls -la.
32. **history**
    * **Purpose**: Displays previously executed commands.
    * **Example**:  
      history  
      Shows a list of past commands.