



Basic Commands and Navigation

Essential Commands

<code>pwd</code>	Print working directory (shows the current directory path).
<code>ls</code>	List directory contents (files and directories).
<code>cd</code>	Change directory (navigate to a different directory). Example: <code>cd Documents</code>
<code>mkdir</code>	Create a new directory. Example: <code>mkdir MyProject</code>
<code>rmdir</code>	Remove an empty directory.
<code>rm</code>	Remove files. Example: <code>rm myfile.txt</code>
<code>cp</code>	Copy files or directories. Example: <code>cp file1.txt file2.txt</code>
<code>mv</code>	Move or rename files or directories. Example: <code>mv oldname.txt newname.txt</code>

File Operations

<code>cat</code>	Concatenate and display file content.
<code>less</code>	View file content page by page. Press <code>q</code> to exit.
<code>head</code>	Display the first few lines of a file.
<code>tail</code>	Display the last few lines of a file.
<code>nano</code>	Simple text editor for creating and modifying files.
<code>chmod</code>	Change file permissions.
<code>chown</code>	Change file owner.

Package Management and System Info

Package Management (Debian/Ubuntu)

<code>sudo apt update</code>	Update the package lists.
<code>sudo apt upgrade</code>	Upgrade installed packages.
<code>sudo apt install</code> <package_name>	Install a new package. Example: <code>sudo apt install vim</code>
<code>sudo apt remove</code> <package_name>	Remove a package.
<code>sudo apt autoremove</code>	Remove automatically all unused packages.
<code>sudo apt search</code> <package_name>	Search for a package.

System Information

<code>uname -a</code>	Display kernel information.
<code>lsb_release -a</code>	Display Linux distribution information.
<code>df -h</code>	Display disk space usage.
<code>free -m</code>	Display memory usage.
<code>top</code>	Display system processes.
<code>htop</code>	Improved interactive process viewer (if installed).
<code>lscpu</code>	Display CPU information.

Networking

<code>ip addr</code>	Show network interfaces and IP addresses.
<code>ping</code> <hostname>	Test network connectivity to a host.
<code>netstat -tlnp</code>	Display network connections and listening ports.

Shortcuts and Productivity

Keyboard Shortcuts

<code>Ctrl + Shift + T</code>	Reopen last closed tab.
<code>Ctrl + Tab</code>	Switch to the next tab.
<code>Ctrl + Shift + Tab</code>	Switch to the previous tab.
<code>Ctrl + +</code>	Zoom in.
<code>Ctrl + -</code>	Zoom out.
<code>Ctrl + 0</code>	Reset zoom.
<code>Ctrl + C</code>	Interrupt a running process.

Terminal Customization

<p>Right-click on the terminal window and select 'Settings' to customize:</p> <ul style="list-style-type: none"> Appearance (font, colors) Behavior (shell, tab management) Keyboard shortcuts <p>Edit <code>.bashrc</code> file to customize the terminal, to change:</p> <ul style="list-style-type: none"> Aliases Functions Environment variables

Shell Navigation

<code>Up Arrow</code>	Recall previous command.
<code>Down Arrow</code>	Recall next command.
<code>Ctrl + R</code>	Search command history.
<code>Tab</code>	Autocomplete file or command name.

Advanced Usage and Crostini

Working with Crostini (Linux Environment)

<p>Crostini allows running Linux applications on Chrome OS. Access it through the Terminal app.</p> <ul style="list-style-type: none"> Sharing Files: Files in your Chrome OS 'Downloads' folder are automatically shared with the Linux environment. Accessing USB Devices: USB support requires enabling specific flags and configurations.

Troubleshooting

<ul style="list-style-type: none"> Terminal Not Responding: Try closing and reopening the terminal. If the issue persists, restart Crostini or Chrome OS. Package Installation Issues: Ensure package lists are updated (<code>sudo apt update</code>). Network Problems: Check network connectivity and DNS settings.
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Advanced Commands

<code>grep</code>	Search for patterns in files. Example: <code>grep 'error' logfile.txt</code>
<code>find</code>	Find files based on various criteria. Example: <code>find . -name '*.txt'</code>
<code>xargs</code>	Build and execute command lines from standard input.
<code>rsync</code>	Remote file synchronization. Example: <code>rsync -avz /local/path user@remote:/remote/path</code>
<code>screen</code> or <code>tmux</code>	Terminal multiplexers for managing multiple terminal sessions.