**Bash Command Cheat Sheet**

**File Management**

| **Command** | **Description** | **Example** |
| --- | --- | --- |
| cp | Copies files or directories. | cp file1.txt file2.txt |
| rm | Removes files. Use -r to remove directories recursively. | rm file.txt or rm -r folder/ |
| rmdir | Removes empty directories. | rmdir emptydir/ |
| mkdir | Creates new directories. | mkdir newdir |
| touch | Creates an empty file or updates the timestamp of an existing file. | touch newfile.txt |

**File and Directory Information**

| **Command** | **Description** | **Example** |
| --- | --- | --- |
| ls | Lists files and directories. Options include -l (detailed) and -a (all files). | ls -l |
| file | Identifies the type of a file by analysing its content. | file image.png |

**Finding Files and Text**

| **Command** | **Description** | **Example** |
| --- | --- | --- |
| find | Searches for files and directories based on criteria like name or size. | find /home -name "\*.txt" |
| locate | Quickly finds files by name using a pre-built database. | locate file.txt |
| grep | Searches for text patterns within files. | grep "pattern" file.txt |

**System Information and Navigation**

| **Command** | **Description** | **Example** |
| --- | --- | --- |
| uname | Displays system information. Use -a for detailed output. | uname -a |
| pwd | Prints the current working directory. | pwd |
| cd | Changes the current directory. Use cd ~ for the home directory. | cd /path/to/directory |

**Command Information**

| **Command** | **Description** | **Example** |
| --- | --- | --- |
| type | Displays how a command is interpreted (built-in, alias, or external). | type ls |
| which | Shows the full path of a command's executable file. | which grep |
| whereis | Locates the binary, source, and manual files for a command. | whereis ls |

**Command Documentation**

| **Command** | **Description** | **Example** |
| --- | --- | --- |
| man | Displays the manual page for a command. | man cp |
| help | Provides built-in help for shell commands. | help cd |
| apropos | Searches for commands and descriptions related to a keyword. | apropos "text" |

**Output and Formatting**

| **Command** | **Description** | **Example** |
| --- | --- | --- |
| echo | Prints text or variables to the terminal. | echo "Hello, World!" |

**Usage Tips**

1. Use man [command] for detailed documentation of any command.
2. Be cautious with rm and find when using wildcards to avoid accidental deletion.
3. Combine grep with find for powerful searches, e.g., find . -name "\*.txt" | xargs grep "pattern".