

The `grep` command in Linux is used to search for specific patterns or strings within files or output. It stands for "Global Regular Expression Print." Here are some common uses of `grep`:

- **Search for a String in a File:**

- Example: `grep "hello" filename.txt` will search for the word "hello" in the file `filename.txt`.

- **Search Recursively in Directories:**

- Example: `grep -r "hello" /path/to/directory` will search for the word "hello" in all files within the specified directory and its subdirectories.

- **Search with Case Insensitivity:**

Example: `grep -i "hello" filename.txt` will search for "hello" in a case-insensitive manner, matching "hello", "Hello", "HELLO", etc.

- **Search with Regular Expressions:**

- Example: `grep "^hello" filename.txt` will match lines that start with "hello".

- **Count the Number of Matches:**

- Example: `grep -c "hello" filename.txt` will count the number of lines that contain the word "hello".

- **Display Line Numbers with Matches:**

- Example: `grep -n "hello" filename.txt` will show the line numbers along with the matching lines.