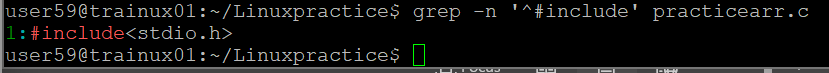
**Pattern Search using Grep**

**1. Extract Lines from a .c File Using grep**

a. all lines beginning with #include with line numbers

grep -n '^#include' assignment.c

This command will display all lines that begin with #include and show the line numbers.



b. Display All Lines Which Do Not Begin with #include

grep -n -v '^#include' assignment.c

This command will show all lines that do not start with #include and show the line numbers.

A computer screen shot of a black screen

Description automatically generated

c. Display the Line Number of main():

grep -n 'main' assignment.c

This command will display the line number of the main() function.



d. Extract All Lines Containing Characters of Opening and Closing Parentheses {(, )}

grep -n '[(){},]' assignment.c

This command will display lines that contain any of the following characters: {, }, (, )

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Description automatically generated

**2. Performing the Above Operations on a Set of \*.c Files**

**a. All Lines Beginning with #include with Line Numbers**

**grep -n '^#include' \*.c**

**b . Display All Lines Which Do Not Begin with #include**

**grep -n -v '^#include' \*.c**

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**c. Line Number of main():**

**grep -n 'main(' \*.c**

**d. All Lines Containing {, }, (, ), or ,:**

**grep -n '[(){},]' \*.c**

**A computer screen with white text

Description automatically generated**