

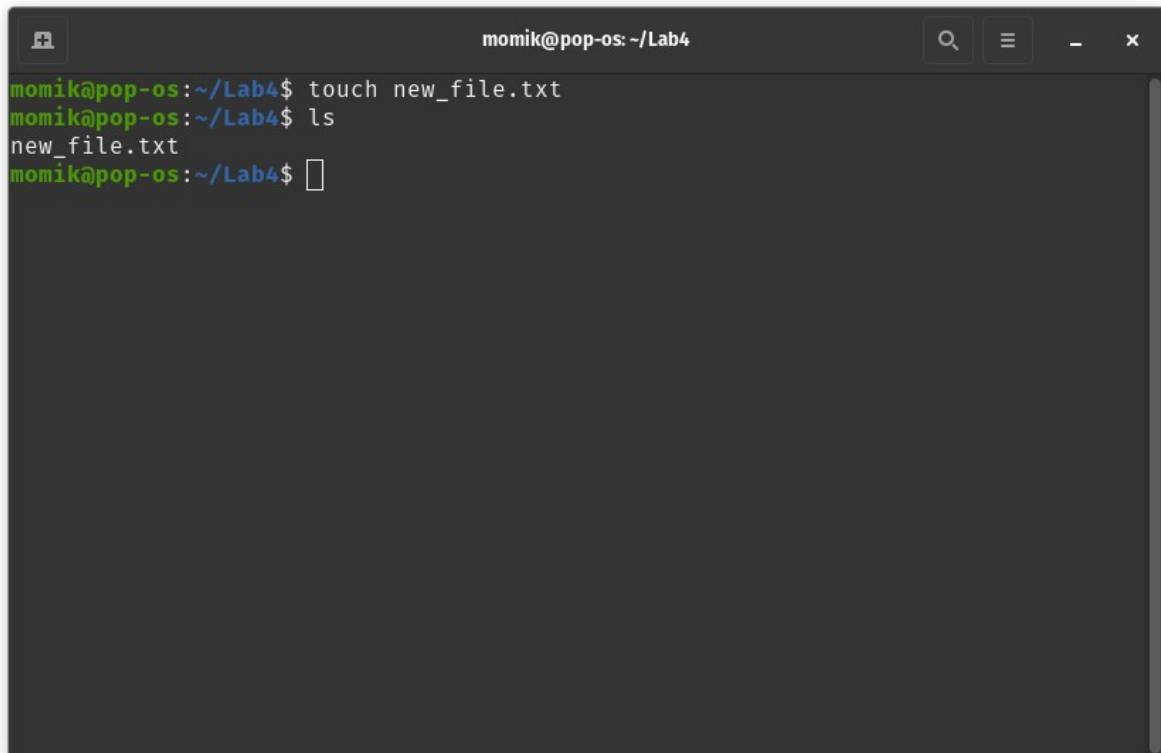
Lab 4

Basic Linux commands – II

1. touch

Syntax: touch [options] file

Description: Create an empty file or update the timestamp of an existing file.

A terminal window titled 'momik@pop-os: ~/Lab4' with search, menu, and window control icons in the title bar. The terminal shows the following commands and output:

```
momik@pop-os:~/Lab4$ touch new_file.txt
momik@pop-os:~/Lab4$ ls
new_file.txt
momik@pop-os:~/Lab4$
```

2. pwd

Syntax: pwd

Description: Print the current working directory.



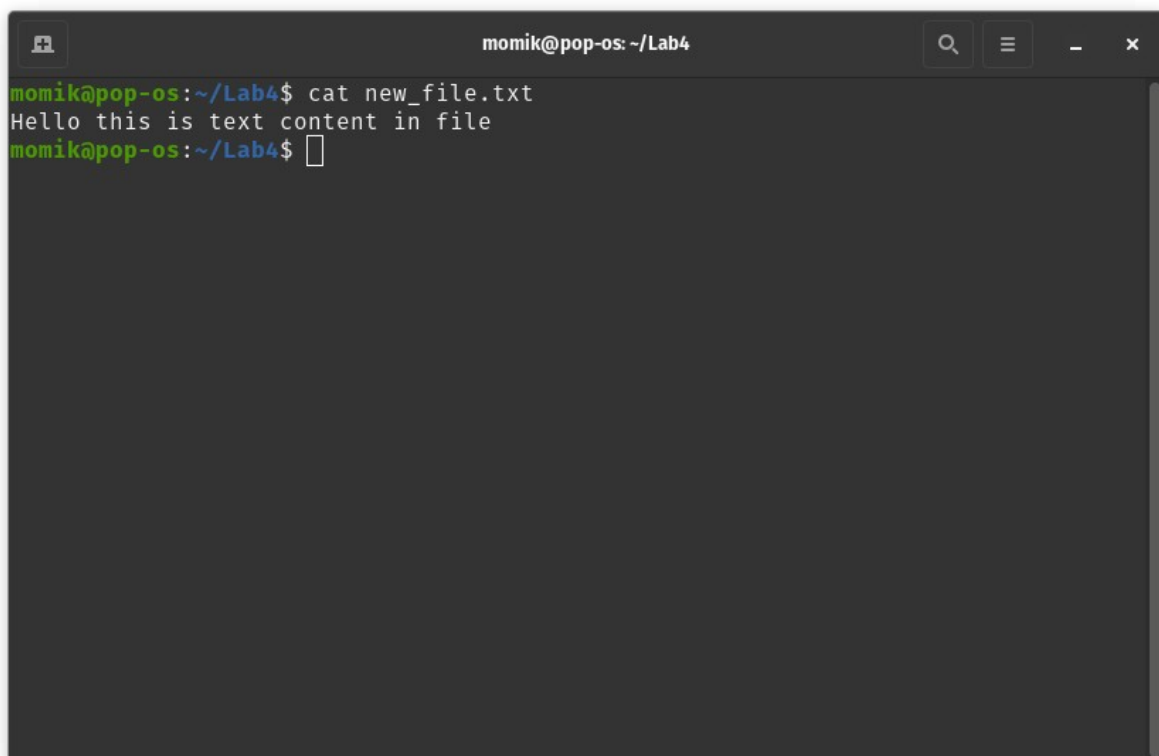
```
momik@pop-os: ~/Lab4
momik@pop-os:~/Lab4$ pwd
/home/momik/Lab4
momik@pop-os:~/Lab4$
```

A terminal window titled "momik@pop-os: ~/Lab4" with search, menu, and window control icons. It shows the execution of the `pwd` command, which outputs `/home/momik/Lab4`. The prompt is `momik@pop-os:~/Lab4$`.

3. cat

Syntax: cat [options] file

Description: Concatenate and display the contents of files.



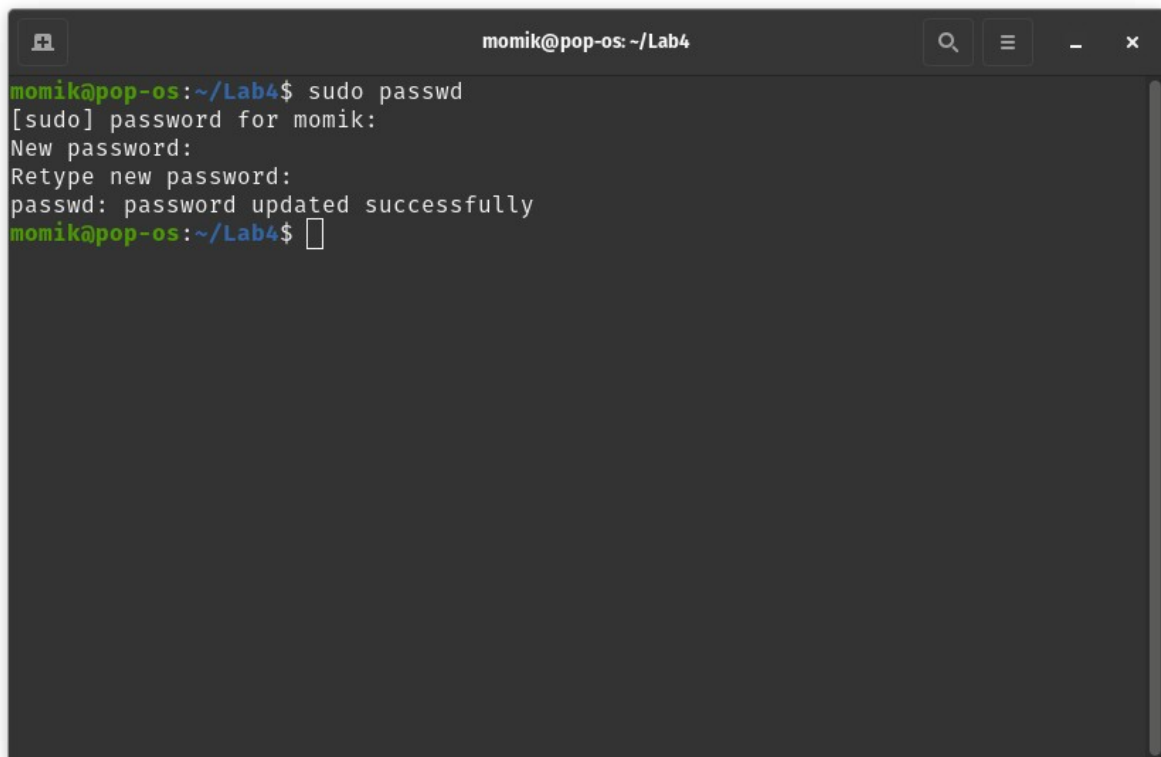
```
momik@pop-os: ~/Lab4
momik@pop-os:~/Lab4$ cat new_file.txt
Hello this is text content in file
momik@pop-os:~/Lab4$
```

A terminal window titled "momik@pop-os: ~/Lab4" with search, menu, and window control icons. It shows the execution of the `cat new_file.txt` command, which outputs `Hello this is text content in file`. The prompt is `momik@pop-os:~/Lab4$`.

4. **passwd**

Syntax: `passwd [options] [username]`

Description: Change the user's password. If no username is specified, it changes the password for the current user.

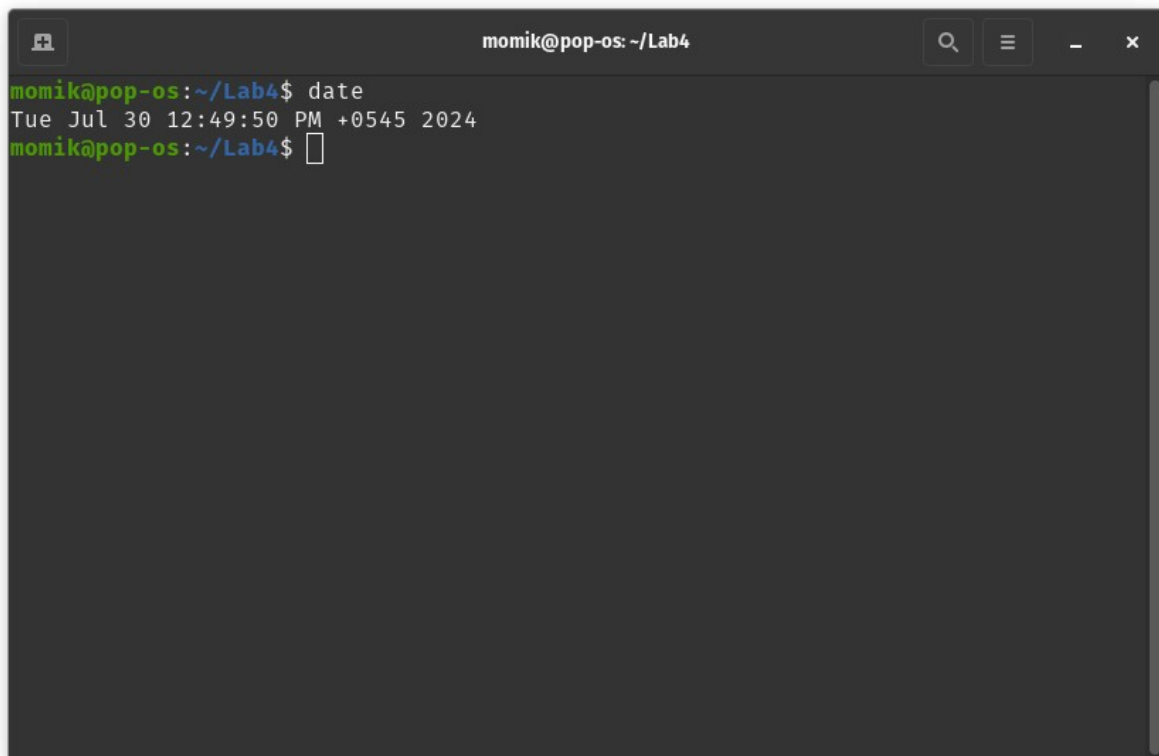
A terminal window titled 'momik@pop-os: ~/Lab4' with standard window controls. The terminal shows the command 'sudo passwd' being executed. The output includes prompts for the current password, a new password, and a confirmation of the password update.

```
momik@pop-os:~/Lab4$ sudo passwd
[sudo] password for momik:
New password:
Retype new password:
passwd: password updated successfully
momik@pop-os:~/Lab4$
```

5. **date**

Syntax: `date [options]`

Description: Display or set the system date and time.

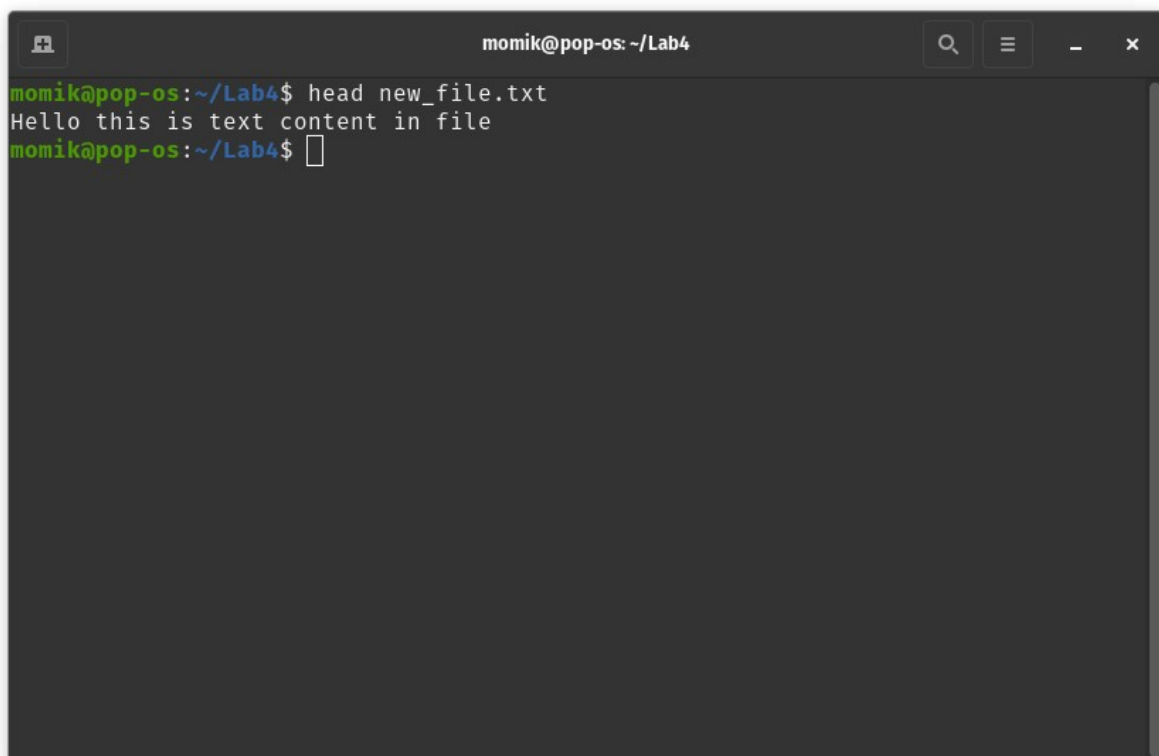
A terminal window titled 'momik@pop-os: ~/Lab4' with search, menu, and window control icons in the title bar. The prompt is 'momik@pop-os:~/Lab4\$'. The command 'date' has been entered, and the output is 'Tue Jul 30 12:49:50 PM +0545 2024'. The prompt is now 'momik@pop-os:~/Lab4\$' followed by a cursor.

```
momik@pop-os:~/Lab4$ date
Tue Jul 30 12:49:50 PM +0545 2024
momik@pop-os:~/Lab4$
```

6. head

Syntax: head [options] [file]

Description: Output the first part of files. By default, it shows the first 10 lines.

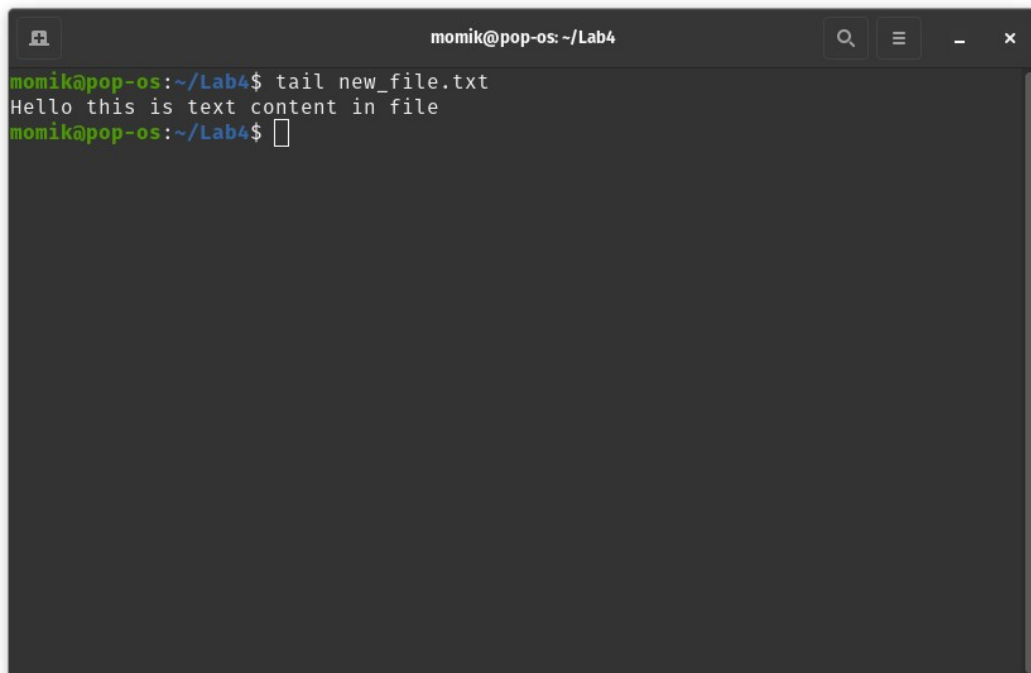
A terminal window titled 'momik@pop-os: ~/Lab4' with search, menu, and window control icons in the title bar. The prompt is 'momik@pop-os:~/Lab4\$'. The command 'head new_file.txt' has been entered, and the output is 'Hello this is text content in file'. The prompt is now 'momik@pop-os:~/Lab4\$' followed by a cursor.

```
momik@pop-os:~/Lab4$ head new_file.txt
Hello this is text content in file
momik@pop-os:~/Lab4$
```

7. tail

Syntax: tail [options] [file]

Description: Output the last part of files. By default, it shows the last 10 lines.

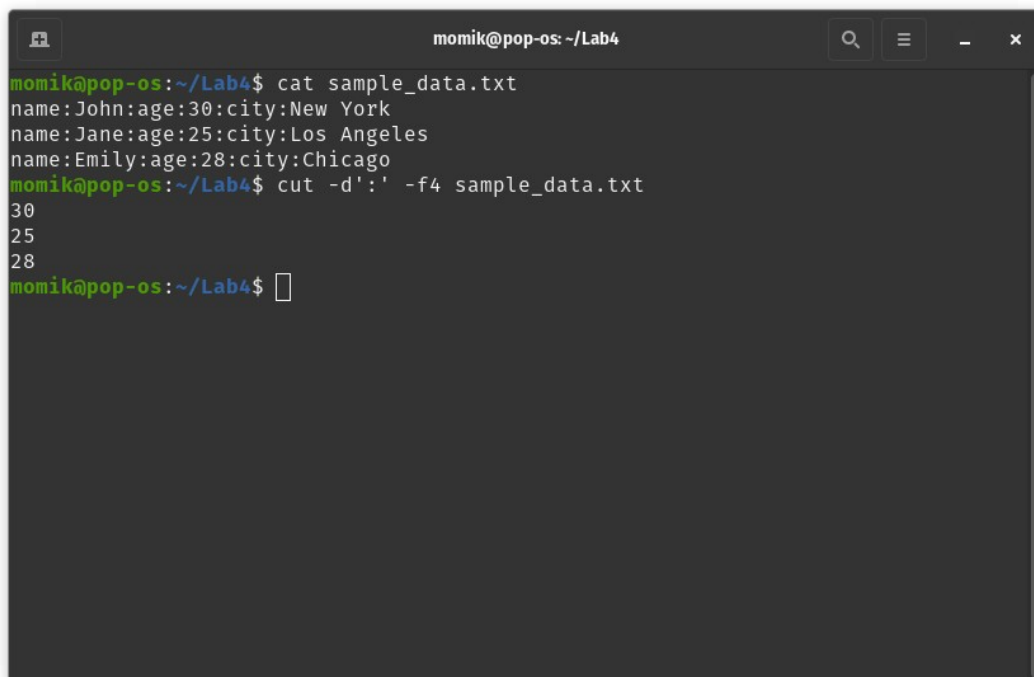
A terminal window titled 'momik@pop-os: ~/Lab4' with search, menu, and window control icons. The prompt is 'momik@pop-os:~/Lab4\$'. The command 'tail new_file.txt' has been entered, and the output 'Hello this is text content in file' is displayed on the next line. The prompt is now 'momik@pop-os:~/Lab4\$' with a cursor.

```
momik@pop-os:~/Lab4$ tail new_file.txt
Hello this is text content in file
momik@pop-os:~/Lab4$
```

8. cut

Syntax: cut [options] [file]

Description: Remove sections from each line of files. Often used to extract specific fields or columns.

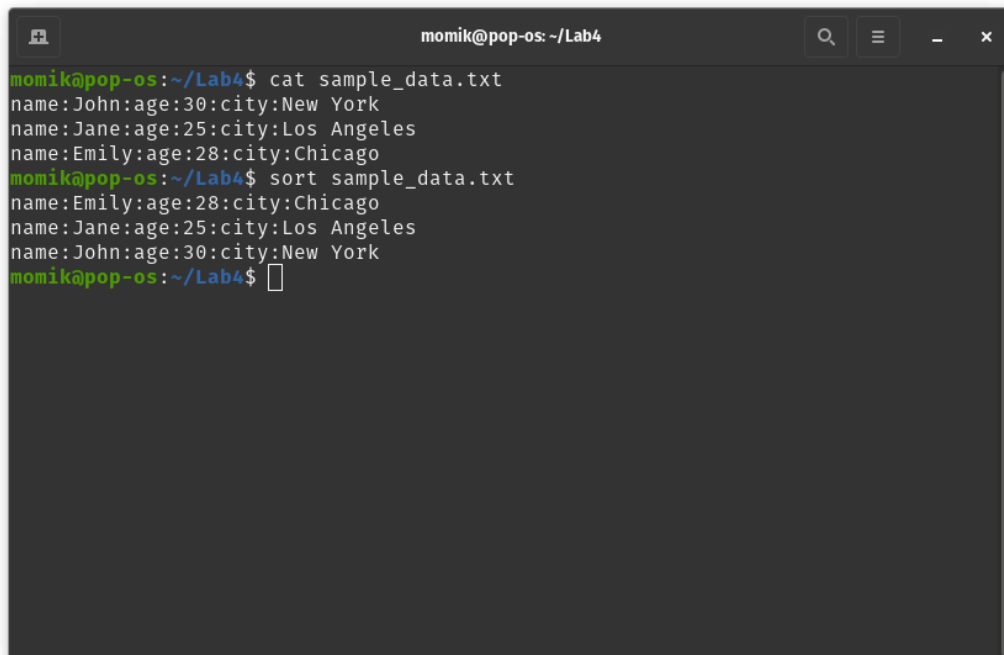
A terminal window titled 'momik@pop-os: ~/Lab4' with search, menu, and window control icons. The prompt is 'momik@pop-os:~/Lab4\$'. The command 'cat sample_data.txt' has been entered, showing three lines of data: 'name:John:age:30:city:New York', 'name:Jane:age:25:city:Los Angeles', and 'name:Emily:age:28:city:Chicago'. The next command 'cut -d':' -f4 sample_data.txt' has been entered, and the output shows the age values '30', '25', and '28' on separate lines. The prompt is now 'momik@pop-os:~/Lab4\$' with a cursor.

```
momik@pop-os:~/Lab4$ cat sample_data.txt
name:John:age:30:city:New York
name:Jane:age:25:city:Los Angeles
name:Emily:age:28:city:Chicago
momik@pop-os:~/Lab4$ cut -d':' -f4 sample_data.txt
30
25
28
momik@pop-os:~/Lab4$
```

9. sort

Syntax: sort [options] [file]

Description: Sort lines of text files.

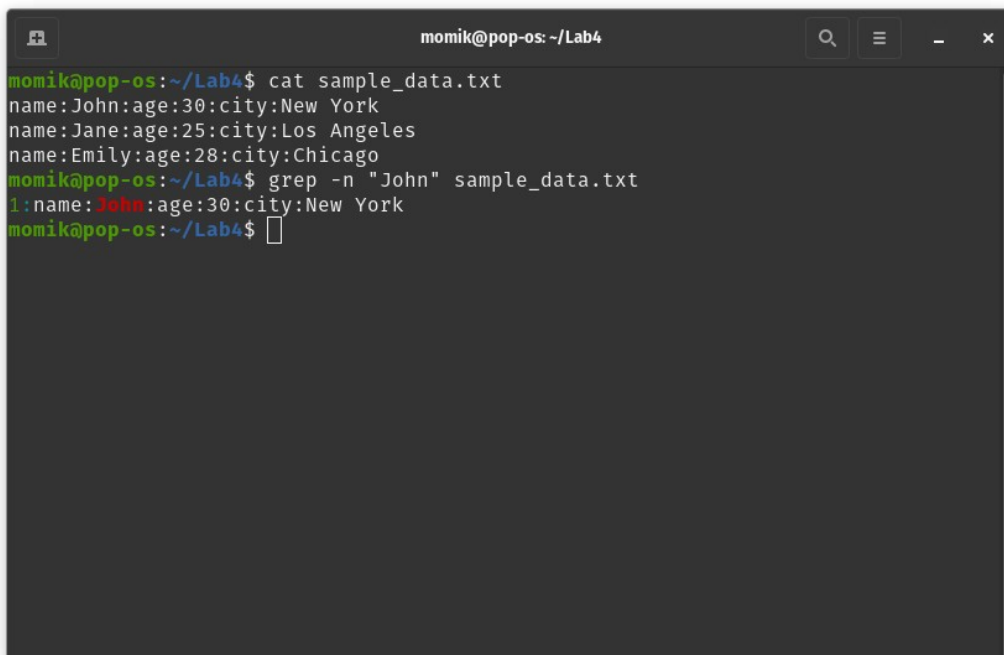
A terminal window titled 'momik@pop-os: ~/Lab4' with search, menu, and window control icons. It shows the execution of 'cat sample_data.txt' and 'sort sample_data.txt'. The first command displays three lines of text: 'name:John:age:30:city:New York', 'name:Jane:age:25:city:Los Angeles', and 'name:Emily:age:28:city:Chicago'. The second command sorts these lines alphabetically by the first field (name), resulting in 'name:Emily:age:28:city:Chicago', 'name:Jane:age:25:city:Los Angeles', and 'name:John:age:30:city:New York'.

```
momik@pop-os:~/Lab4$ cat sample_data.txt
name:John:age:30:city:New York
name:Jane:age:25:city:Los Angeles
name:Emily:age:28:city:Chicago
momik@pop-os:~/Lab4$ sort sample_data.txt
name:Emily:age:28:city:Chicago
name:Jane:age:25:city:Los Angeles
name:John:age:30:city:New York
momik@pop-os:~/Lab4$
```

10.grep

Syntax: grep [options] pattern [file]

Description: Search for patterns within files and output matching lines.

A terminal window titled 'momik@pop-os: ~/Lab4' with search, menu, and window control icons. It shows the execution of 'cat sample_data.txt' and 'grep -n "John" sample_data.txt'. The first command displays the same three lines of text as in the previous example. The second command searches for the pattern 'John' and outputs the line number and the matching line: '1:name:John:age:30:city:New York'.

```
momik@pop-os:~/Lab4$ cat sample_data.txt
name:John:age:30:city:New York
name:Jane:age:25:city:Los Angeles
name:Emily:age:28:city:Chicago
momik@pop-os:~/Lab4$ grep -n "John" sample_data.txt
1:name:John:age:30:city:New York
momik@pop-os:~/Lab4$
```