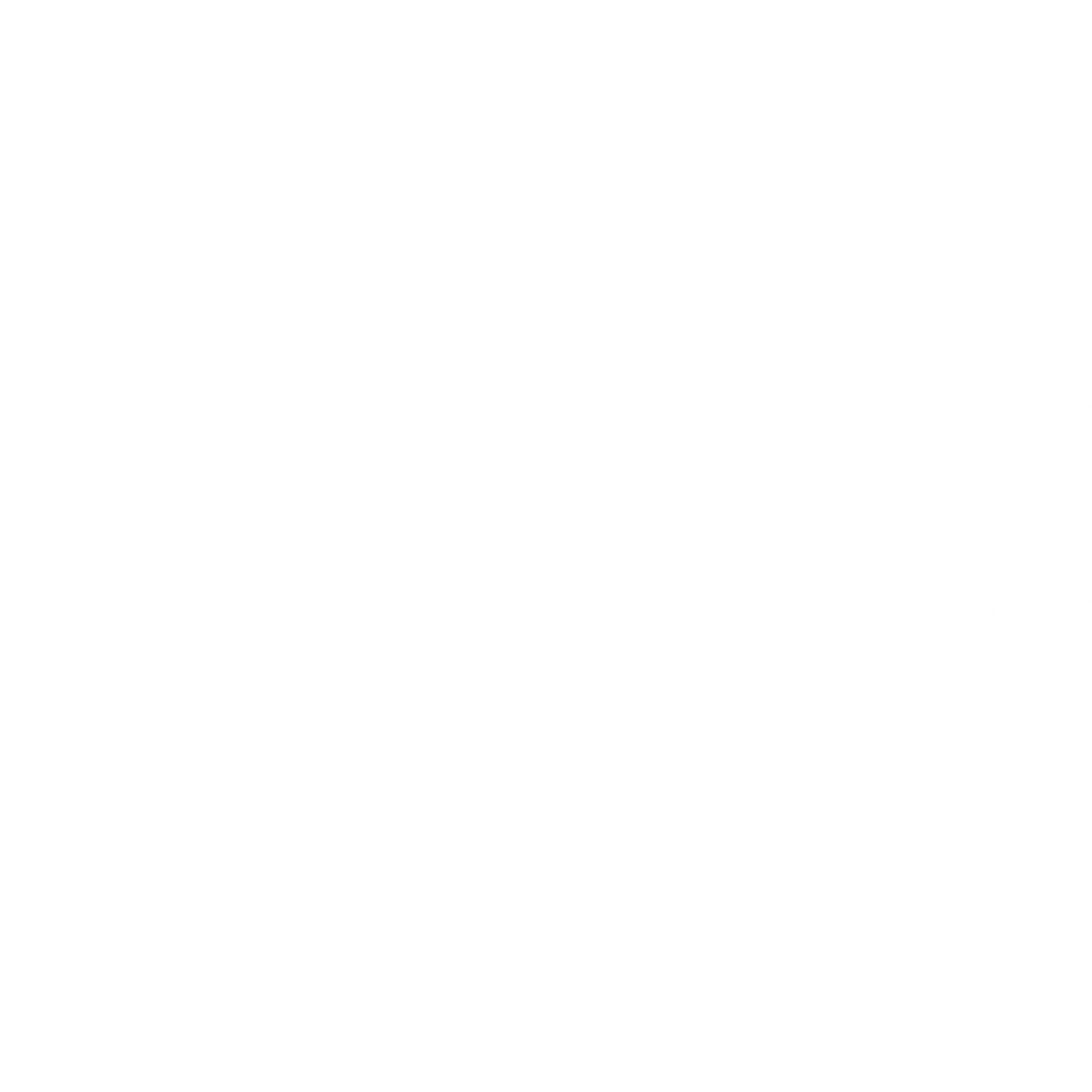
[](https://www.instagram.com/unknown_account835/)[](https://www.facebook.com/profile.php?id=100063712182245)

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Submitted to Rikesh Maharjan

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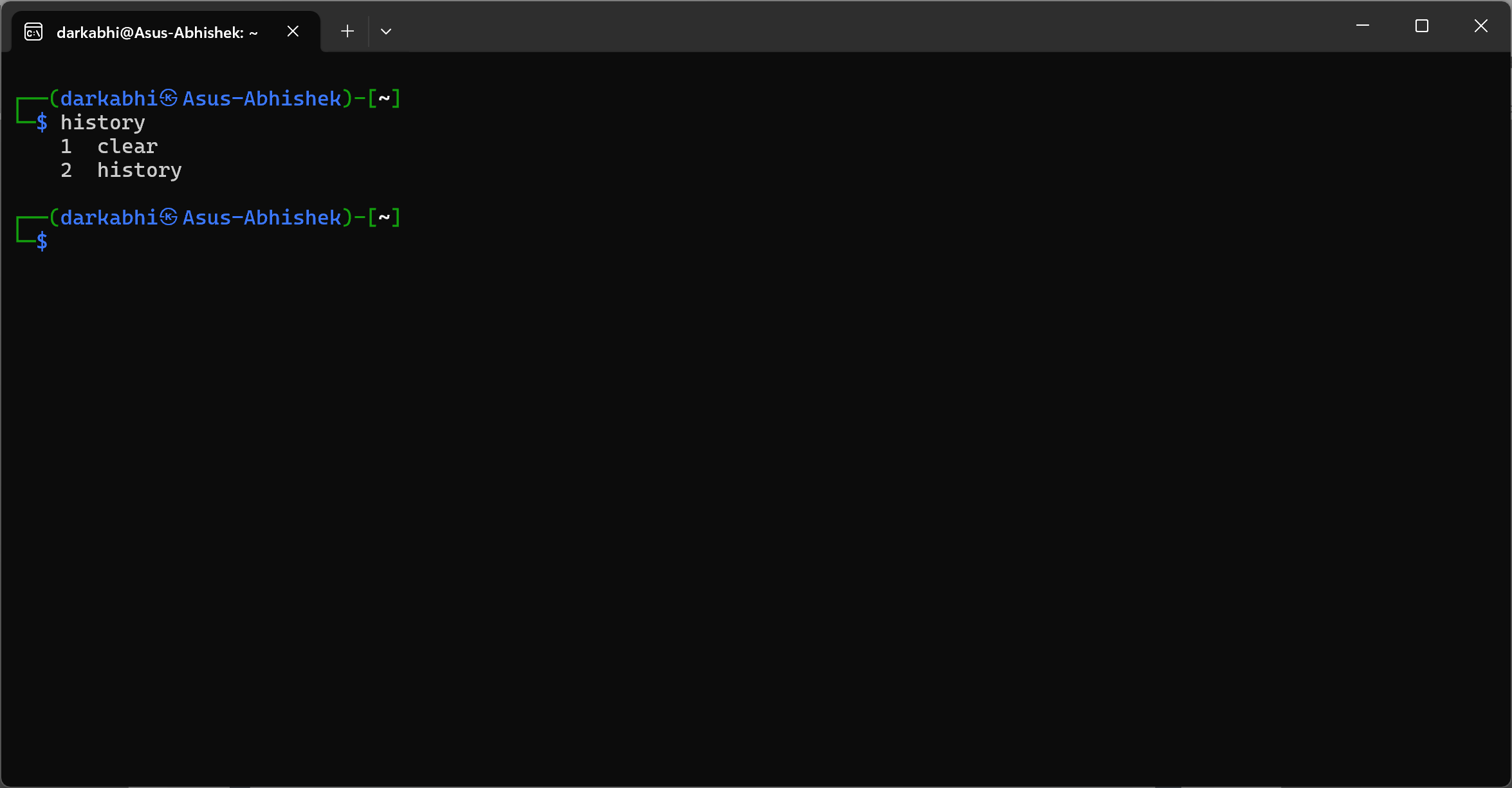
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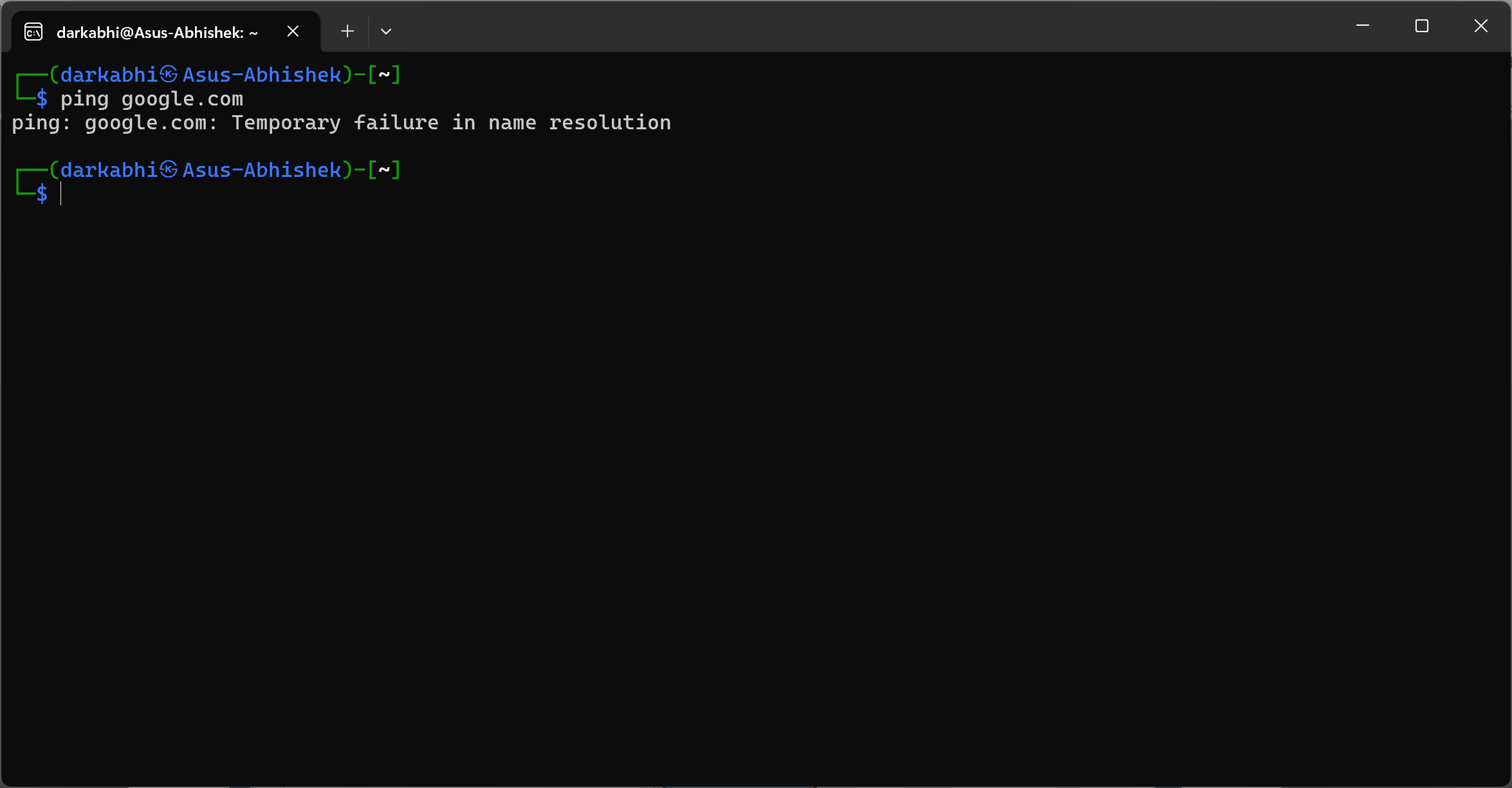
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# Linux Fundamental Examination

## Setting up the terminal:

Visual: The terminal screen shows the command.



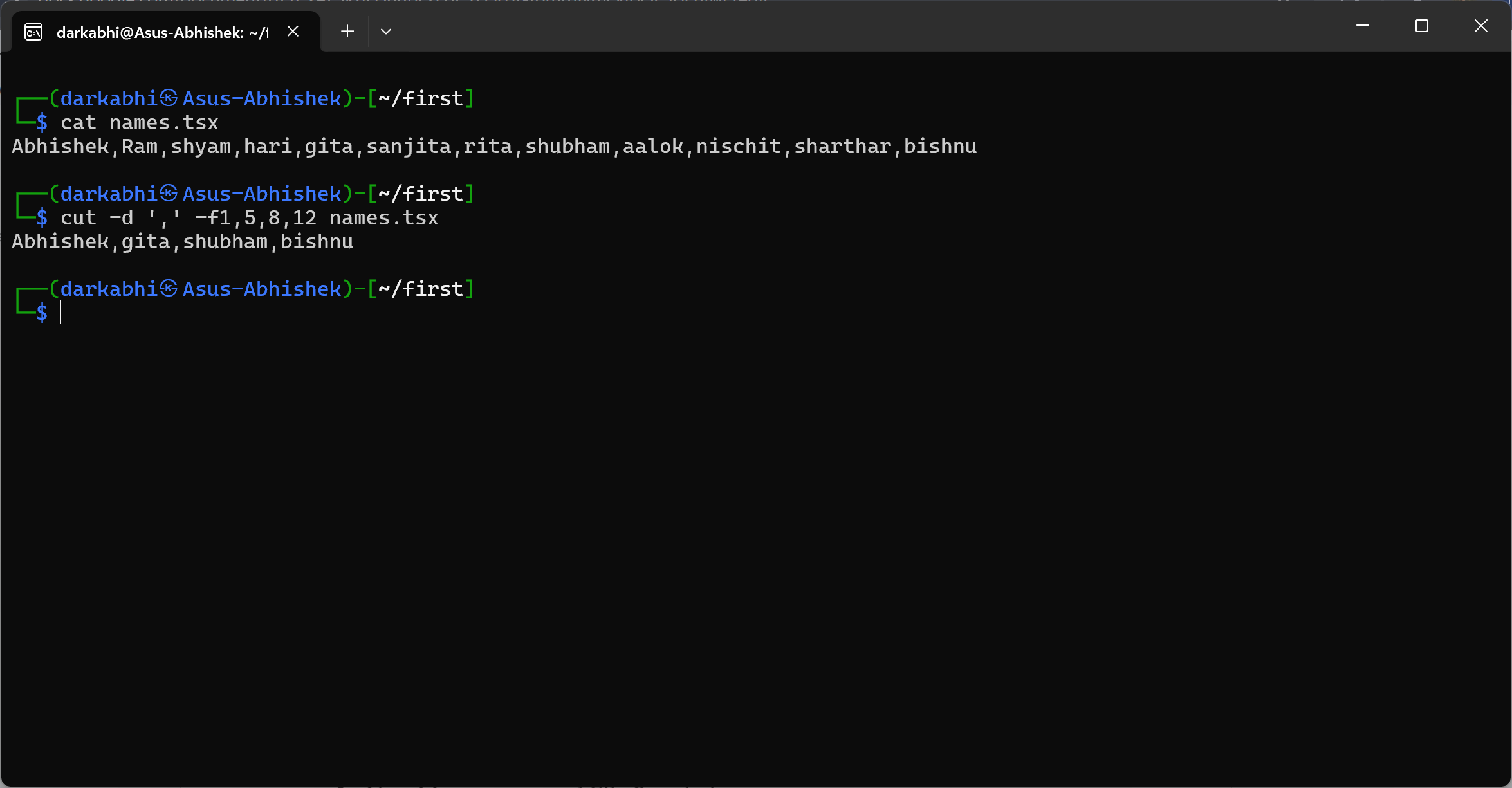


## Create a directory:

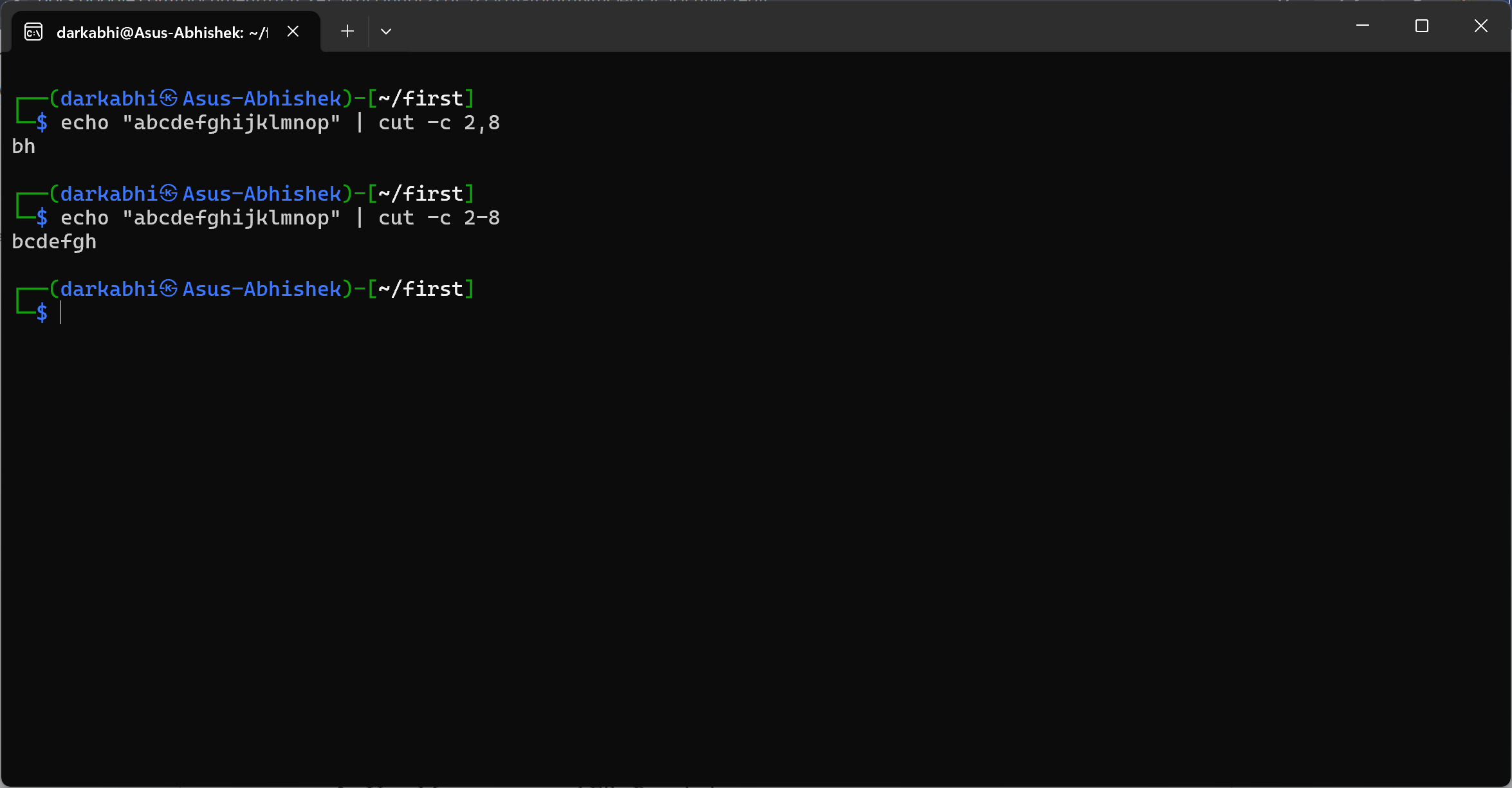
### a) What does cut command do with examples?

The ` cut ` command is used to extract sections from each line of files or input data.

* **Example 1:** Extracting characters from position 2 to 8



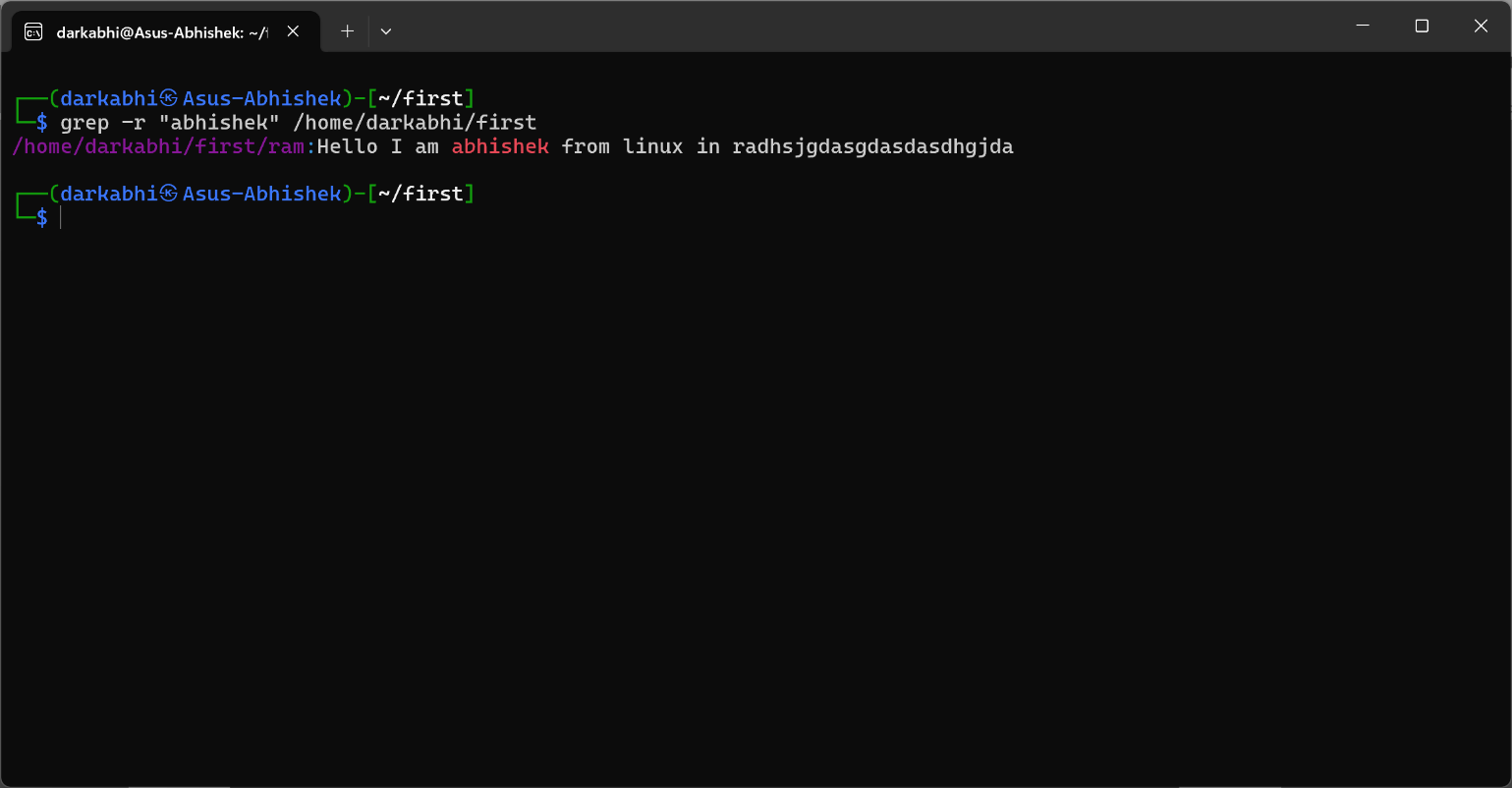
* **Example 2:** Extracting characters from position 2 to 8



### b) What do grep and find commands do?

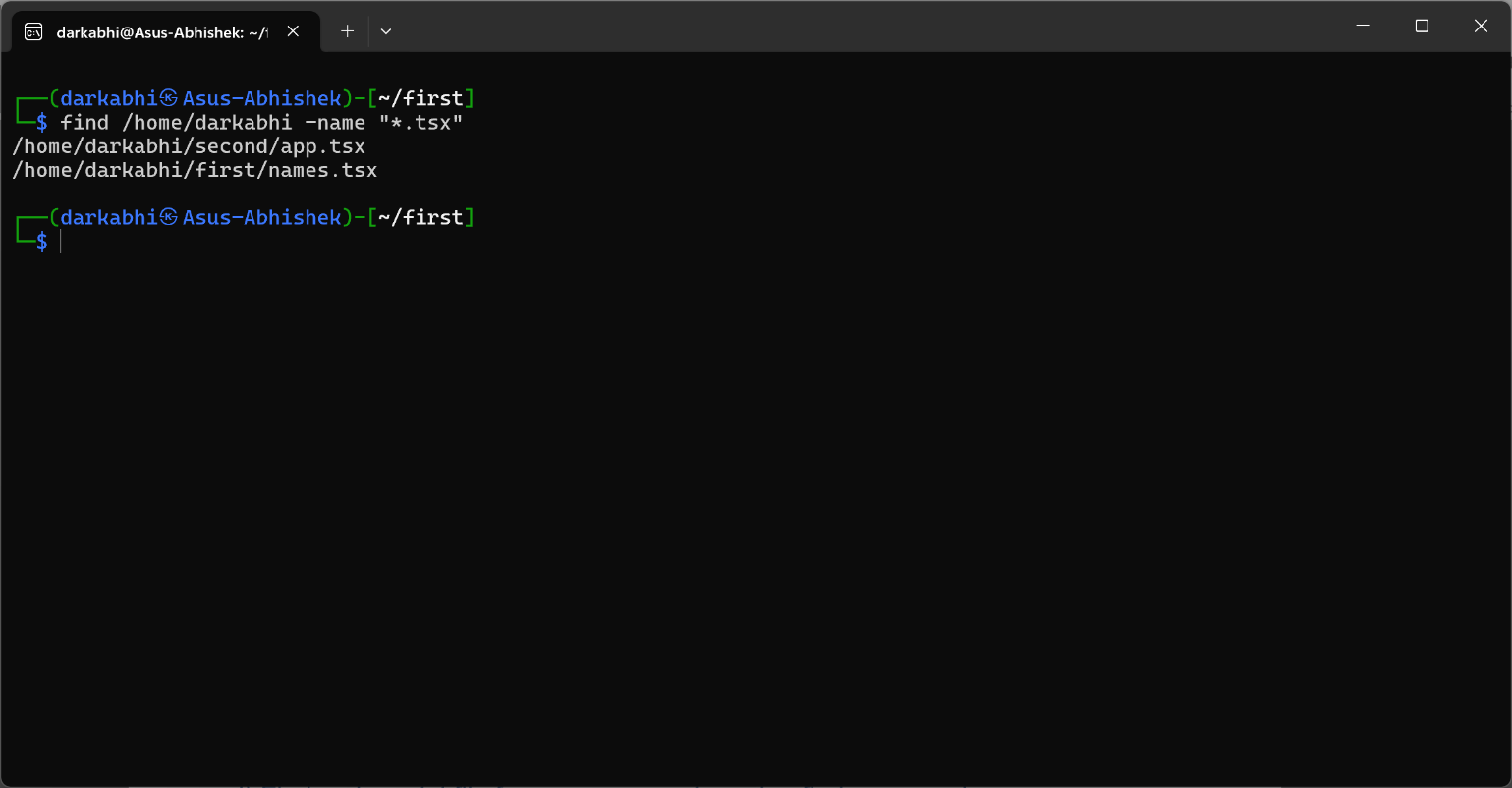
The ` grep ` command is used to search for patterns within files.

* **Example 1:** Search for a string in all files within a directory:

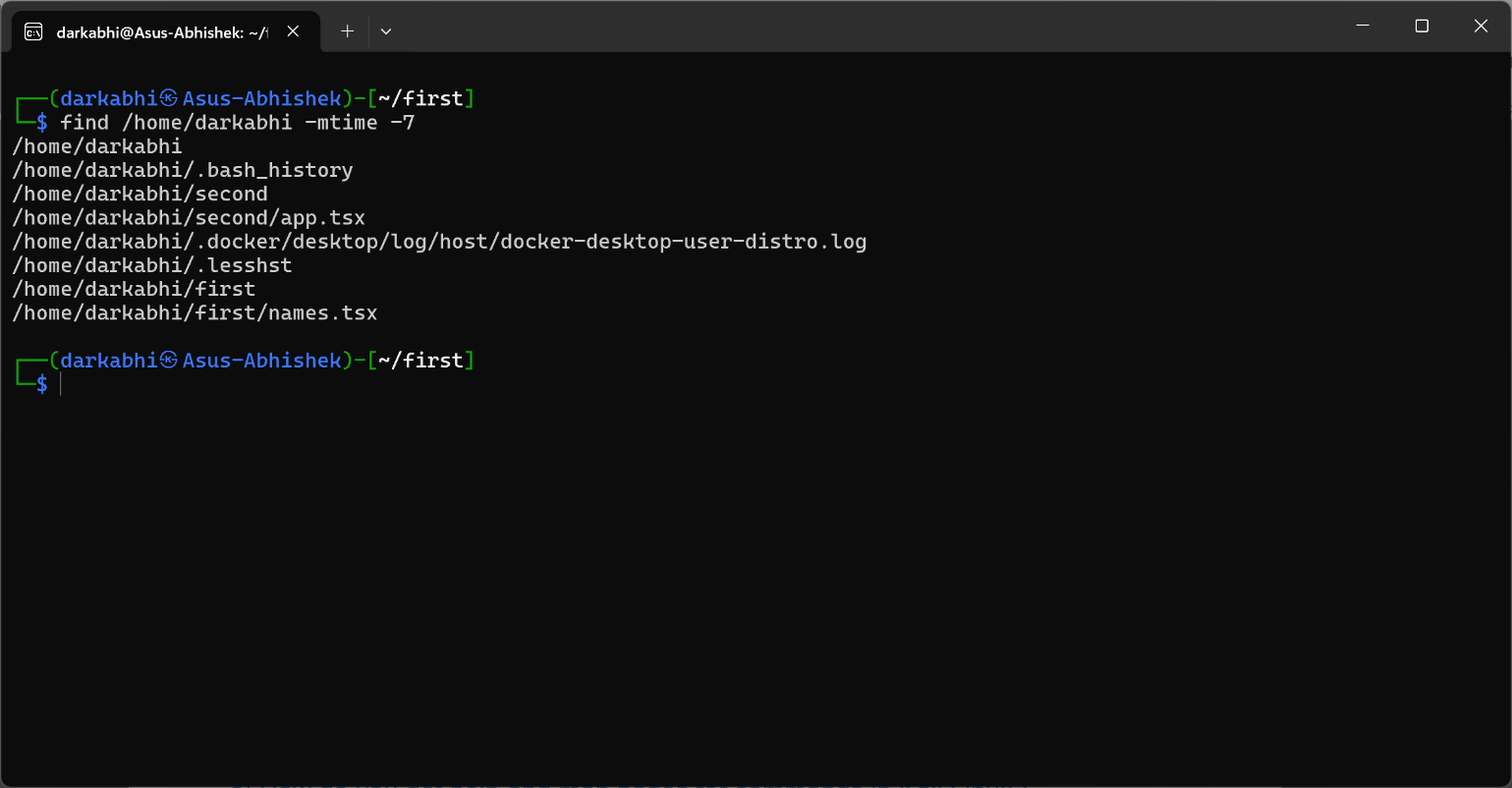


The ` find ` command is used to search for and directories in a directory.

* **Example 1:** Find all .tsx files in the /home/darkabhi directory:

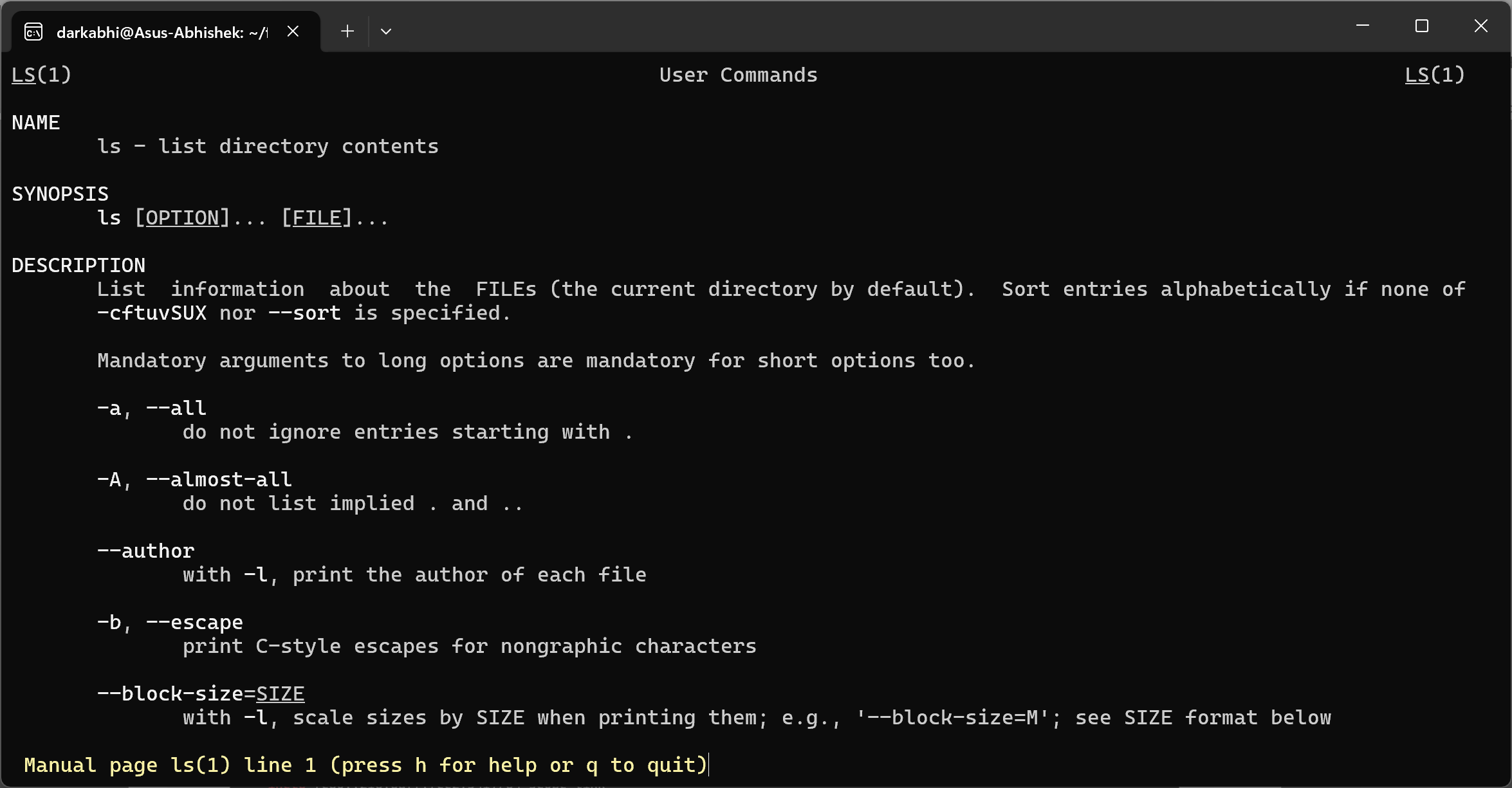


* **Example 2:** Find files modified in the last 7 days:



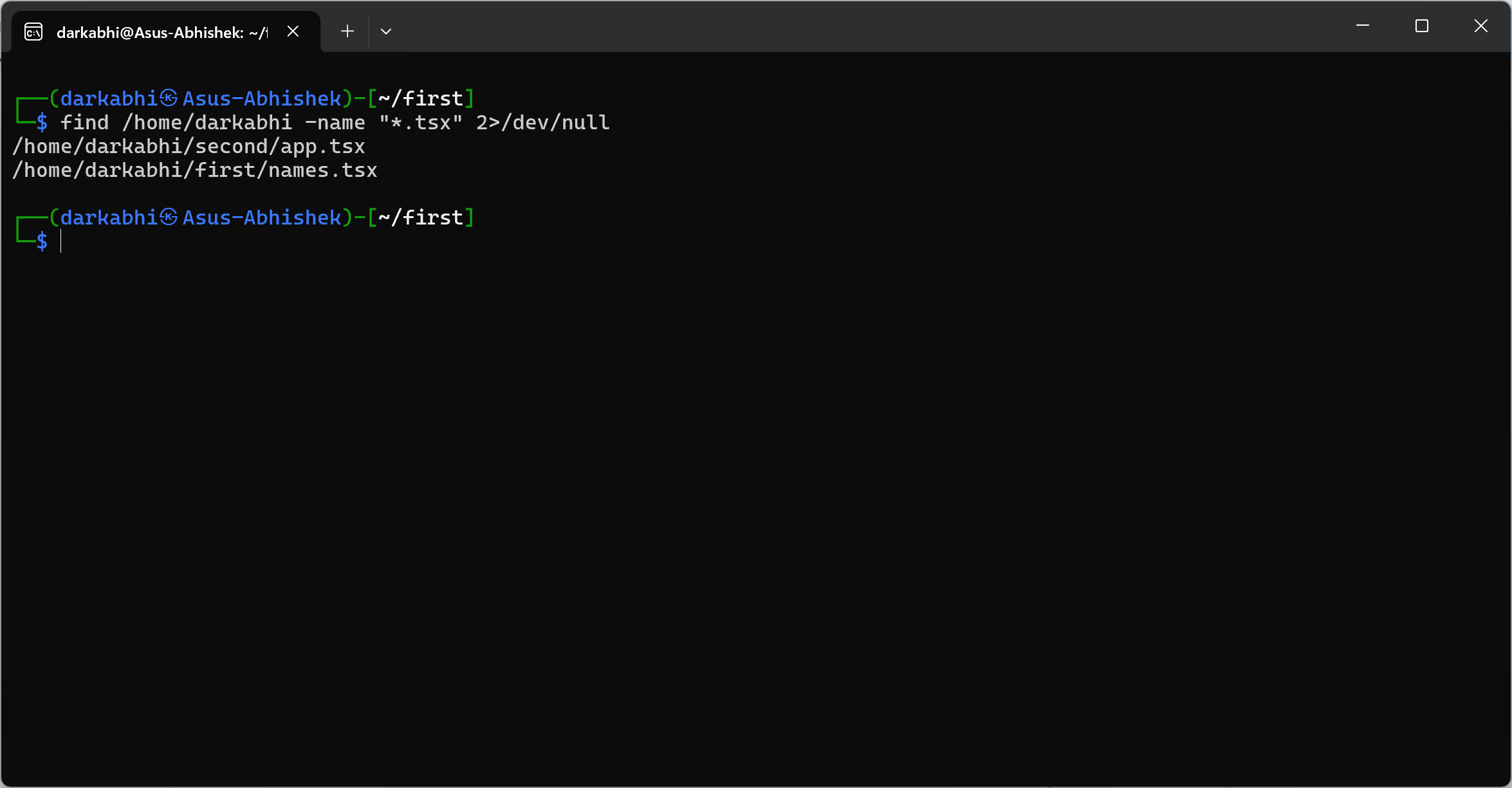
### c) How do you get help and man pages for commands in Kali Linux?

The ` man ` command is to get help and man pages for commands:



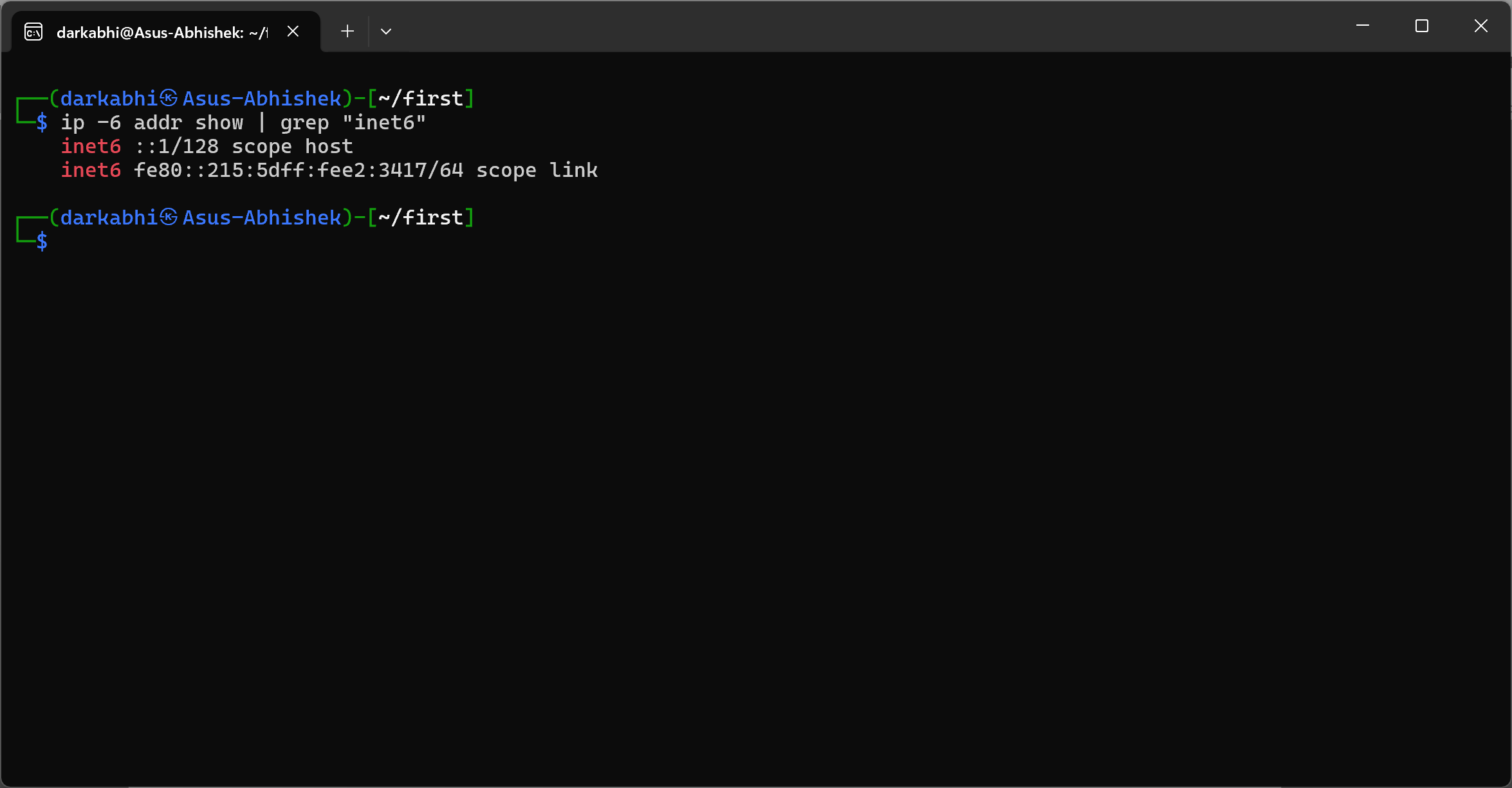
### d) Find rockyou.txt file from your computer using find command

* Visual: The terminal screen shows the command.



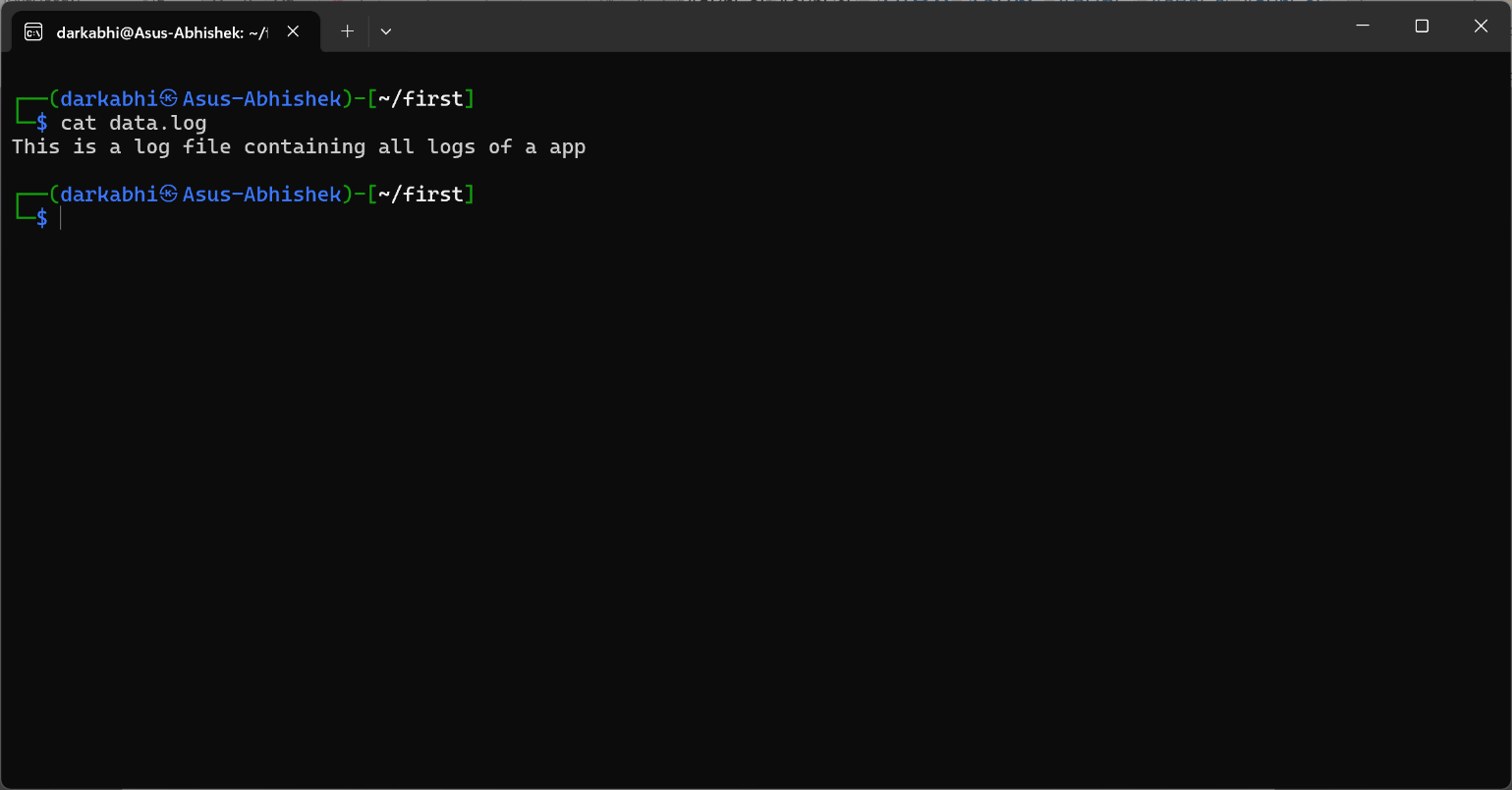
### e) Get an Ipv6 only from your devices using cut command

To get only the IPv6 address:

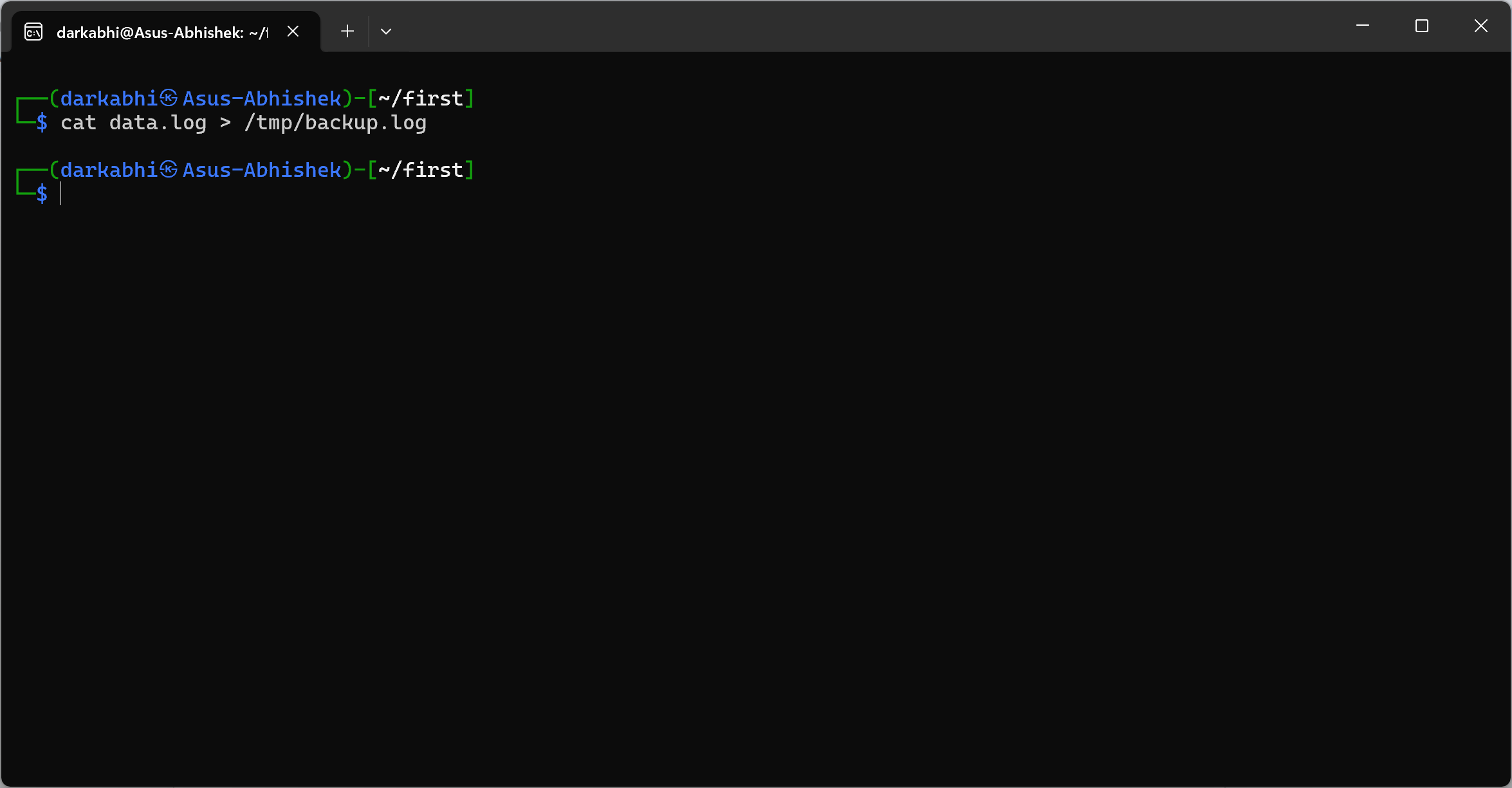


## Standard Redirection:

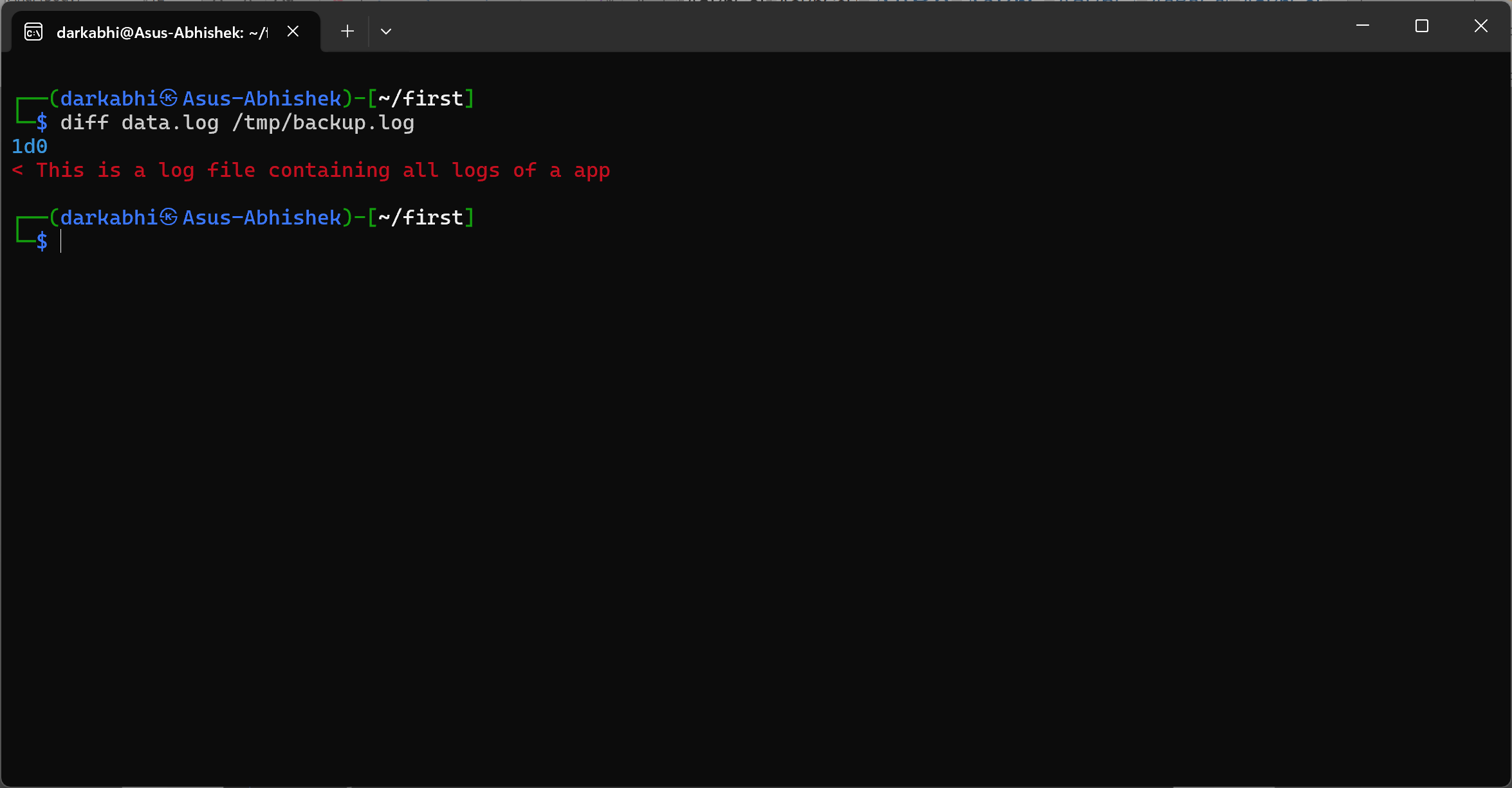
### a) Display the contents of a text file 'data.log' onto the terminal.



### b) Redirect the output to a new file 'backup.log' in /tmp folder

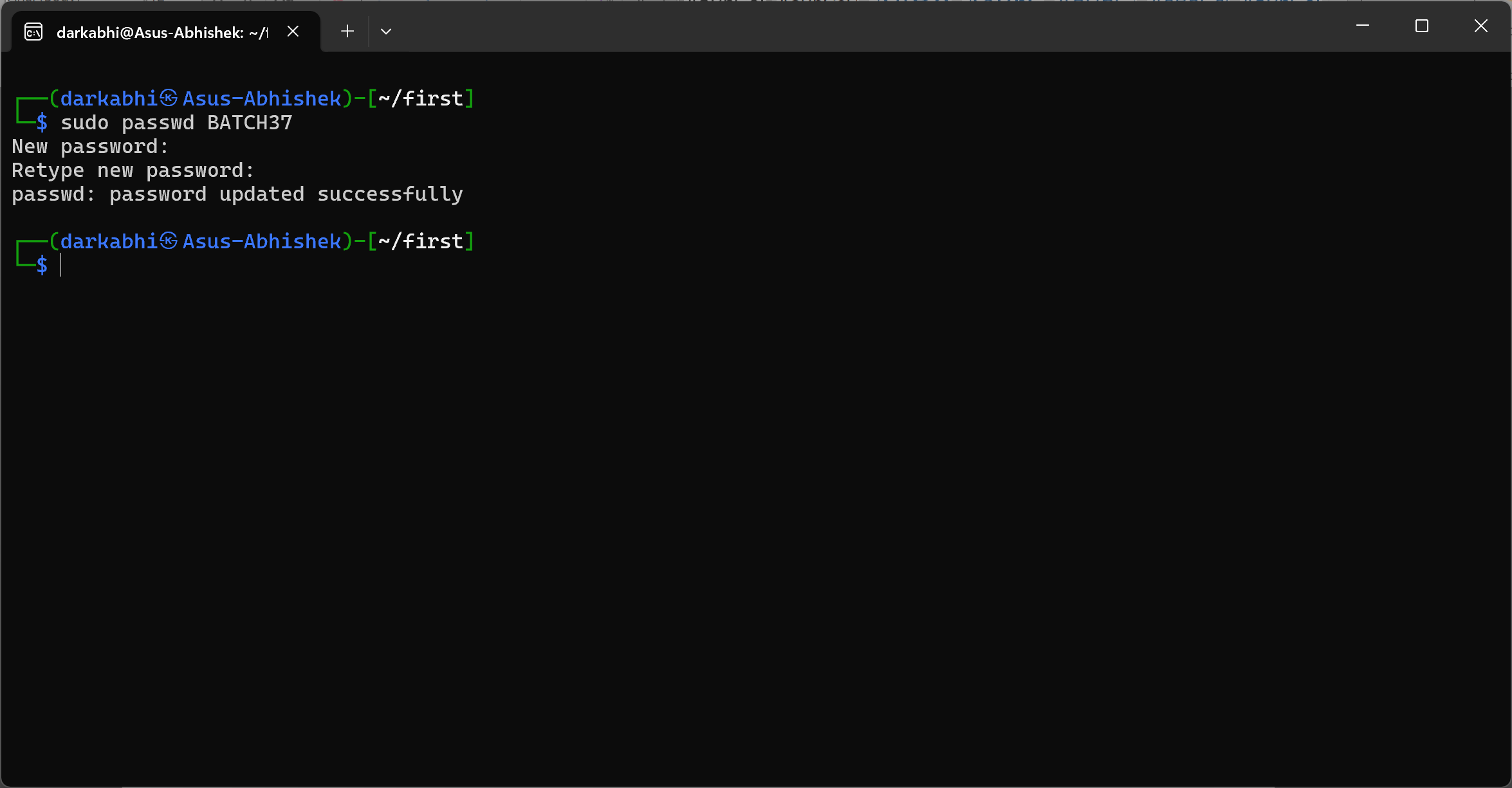


### c) Verify 'backup.log' contains same data as 'data.log' using diff.

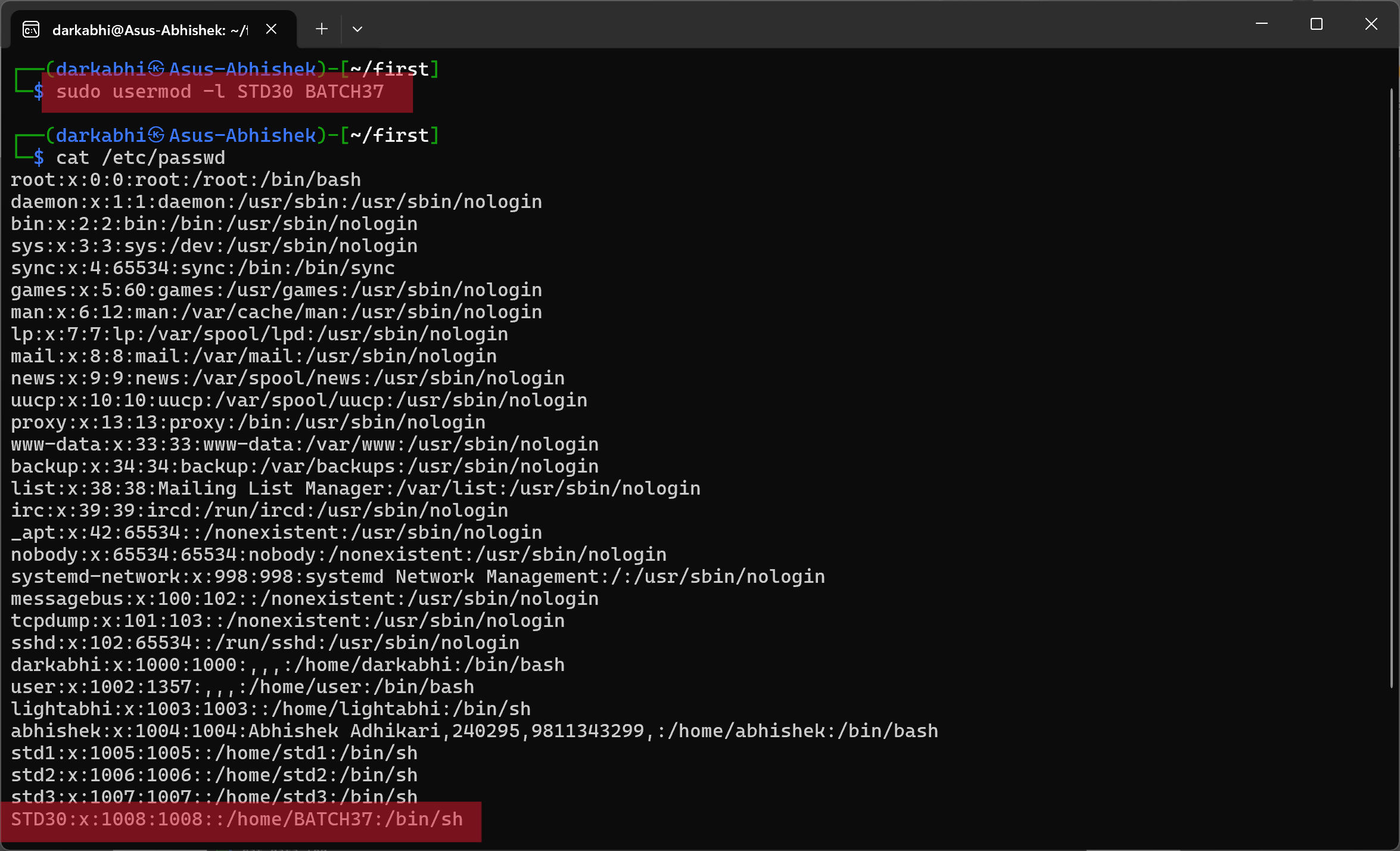


## User Management and File Permissions:

### a) Create a user named "BATCH37" with a unique password and add it to the 'Ethical' group.

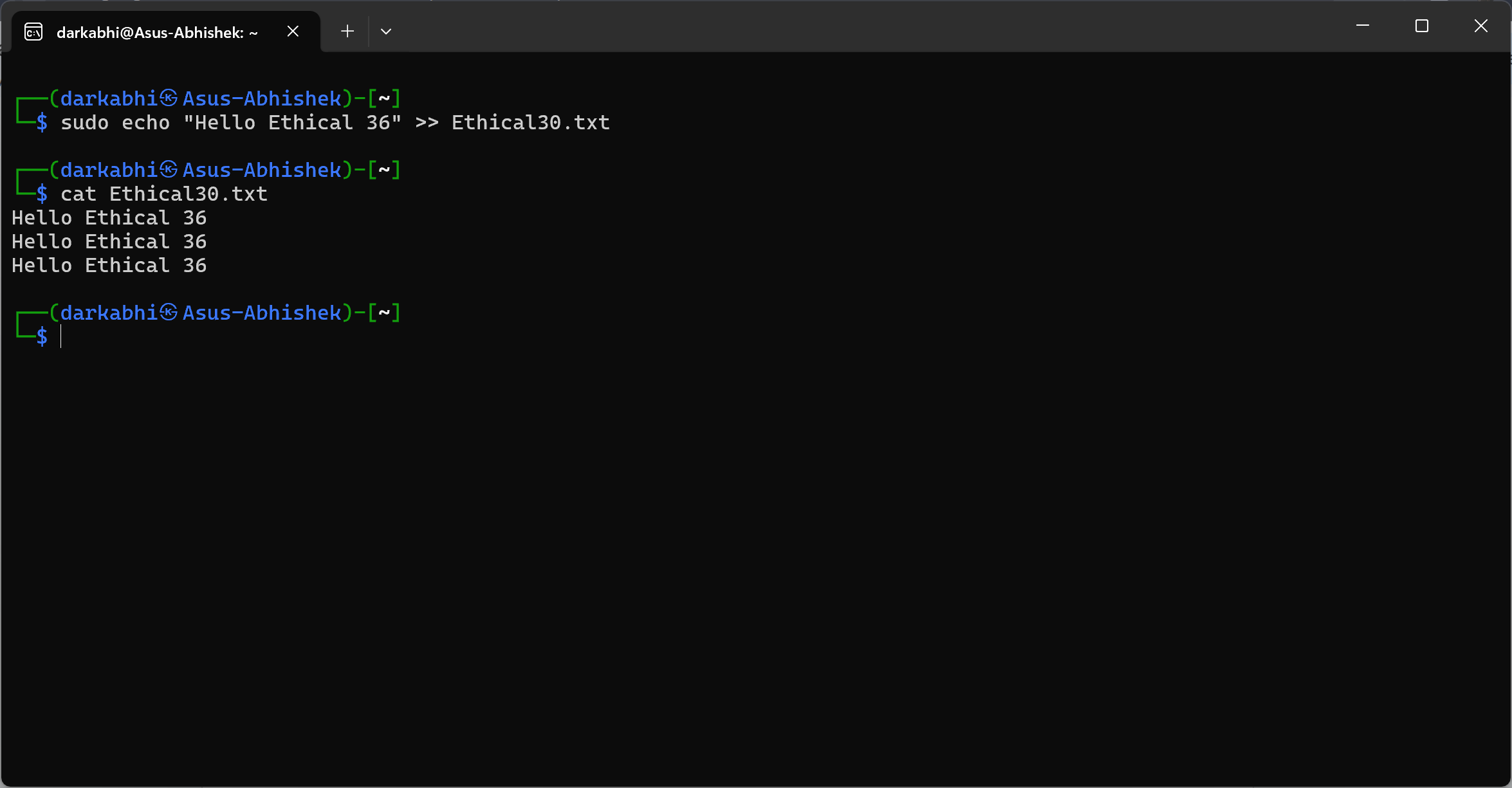


### b) Change the username from "BATCH35" to "STD30".

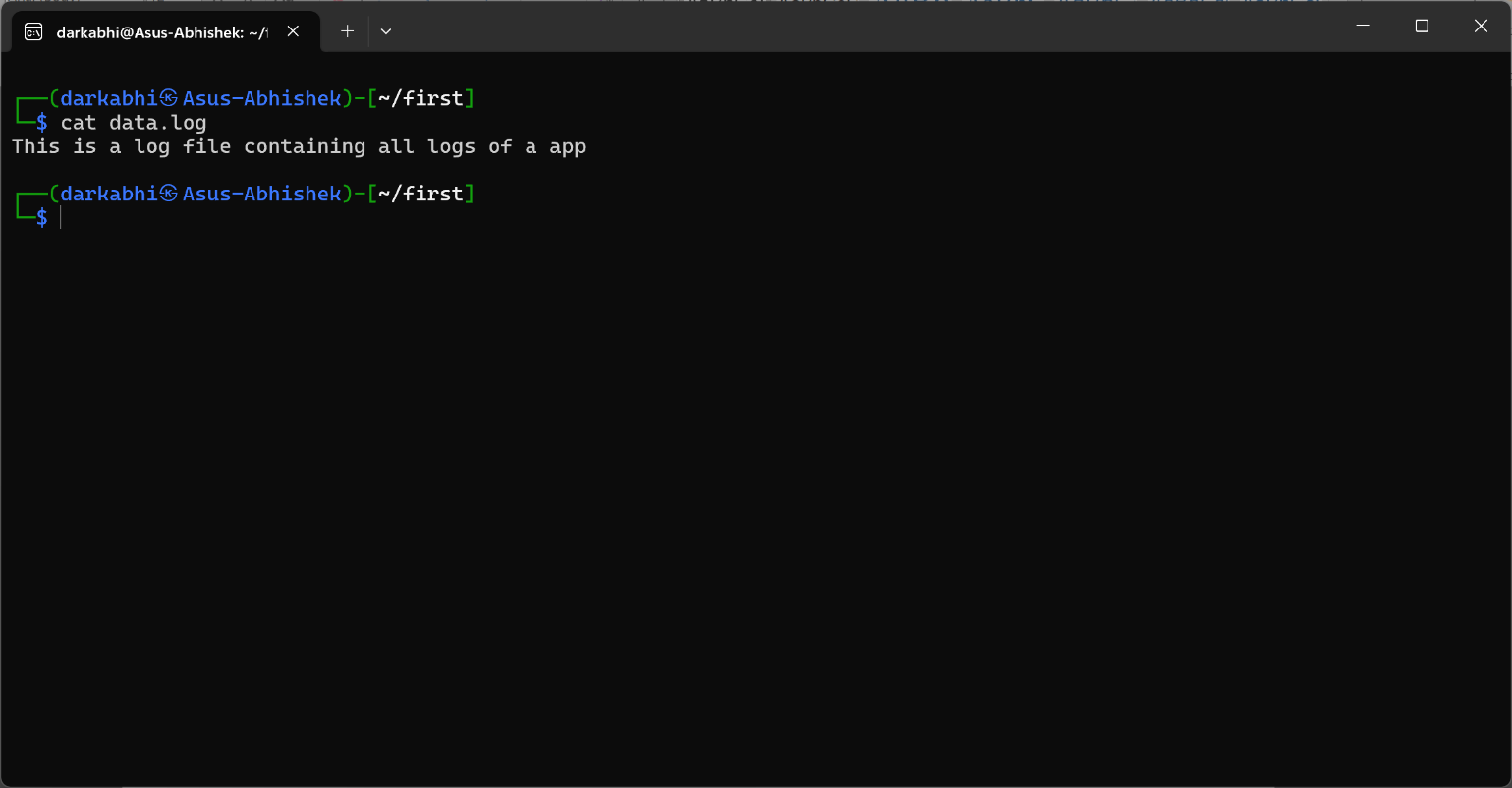


sudo userdel -r STD30

### c) Create a file named "Ethical30.txt" in the user's home directory and append "Hello Ethical 36" and delete the user.



### d) Find rockyou.txt file from your computer using find command



### e) Get an Ipv6 only from your devices using cut command

* Visual: The terminal screen shows the command.
* **What is Virtualization, why companies need it, and name 2 software providing virtualization platforms [3]**:
  + **Virtualization**: Virtualization is the process of creating virtual versions of physical hardware, such as servers, storage devices, and network resources. It allows multiple virtual machines (VMs) to run on a single physical machine, enabling better utilization of resources.
  + **Why companies need it**: Companies use virtualization to reduce hardware costs, improve scalability, enhance disaster recovery options, and simplify management.
  + **Two software platforms**:
    - VMware
    - VirtualBox
* **How can we install Kali Linux in VirtualBox or VMware if we have (kali.ova, kali.vdi, kali.iso)? [2]**:
  + For .ova file:
    - Open VirtualBox/VMware and import the .ova file using the "Import Appliance" option.
  + For .vdi file:
    - Create a new virtual machine and use the .vdi as the hard disk.
  + For .iso file:
    - Create a new virtual machine and mount the .iso as the installation disk, then follow the installation prompts.

**5. Text Editor**

* **How do you enter insert mode in Vim? [1]**:
  + Press i in command mode.
* **What command would you use in Vim to save your changes and exit the editor? [1]**:
  + :wq
* **In Vim, how would you delete an entire line of text? [1]**:
  + Press dd in command mode.
* **How do you save a file in Nano? [1]**:
  + Press Ctrl + O and then Enter.
* **Write “I am noob” in hacker.txt file using echo command [1]**:

bash

Copy code

echo "I am noob" > hacker.txt