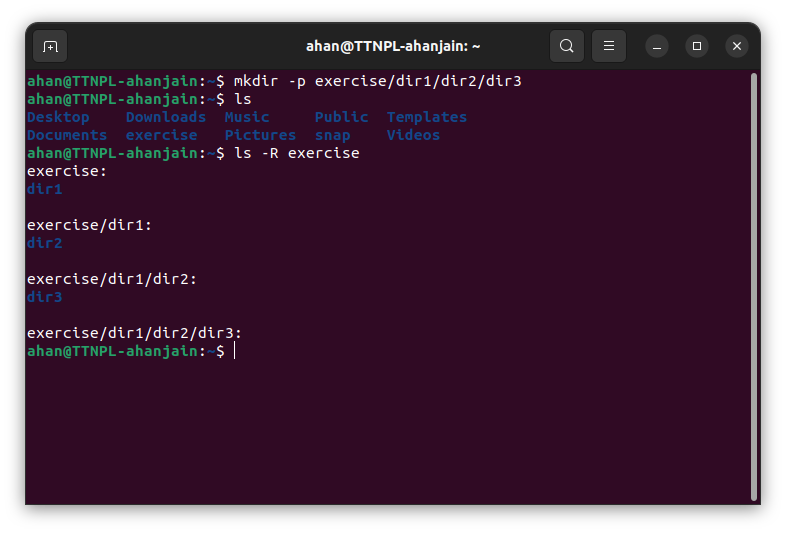
**Session: Introduction to Linux**

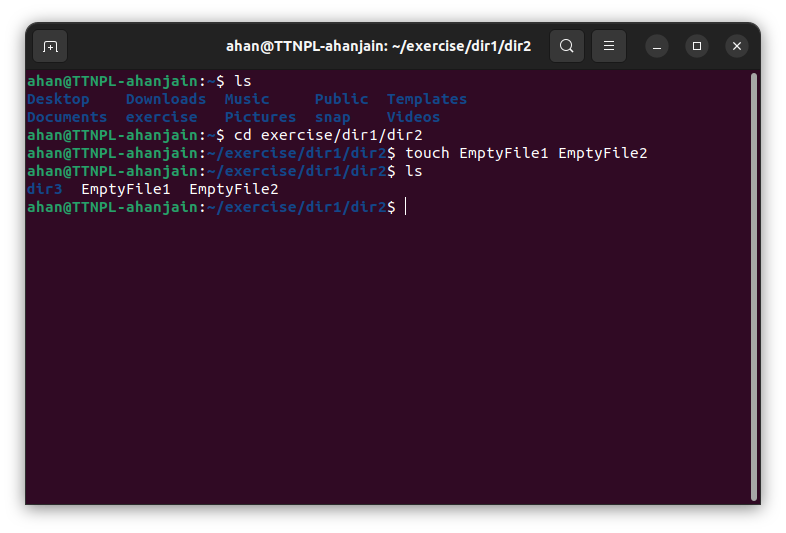
**Name: Ahan Jain**

**EmpID: 8202**

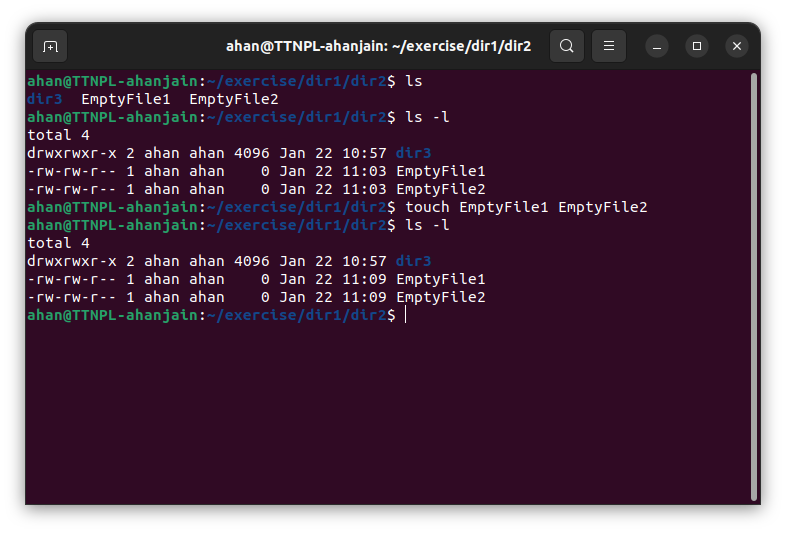
**1. Create a directory "exercise" inside your home directory and create a nested (dir1/dir2/dir3) directory structure inside "exercise" with a single command.**

****

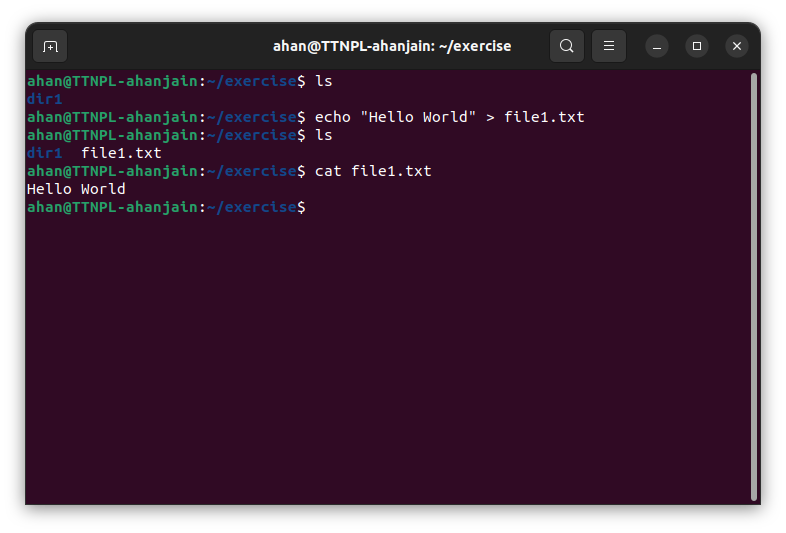
**a. Create two empty files inside the dir2 directory: emptyFile1, emptyFile2 in single command.**

****

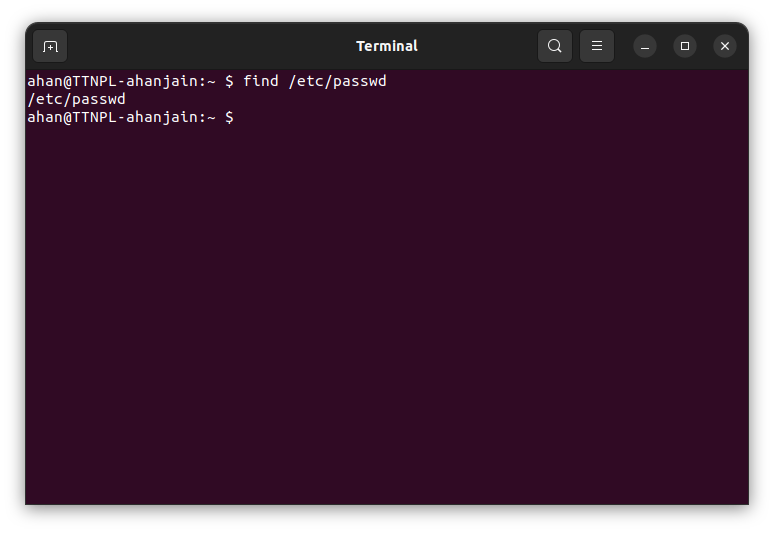
**b. Change the timestamp of empty File1, emptyFile2 which exist in dir2.**

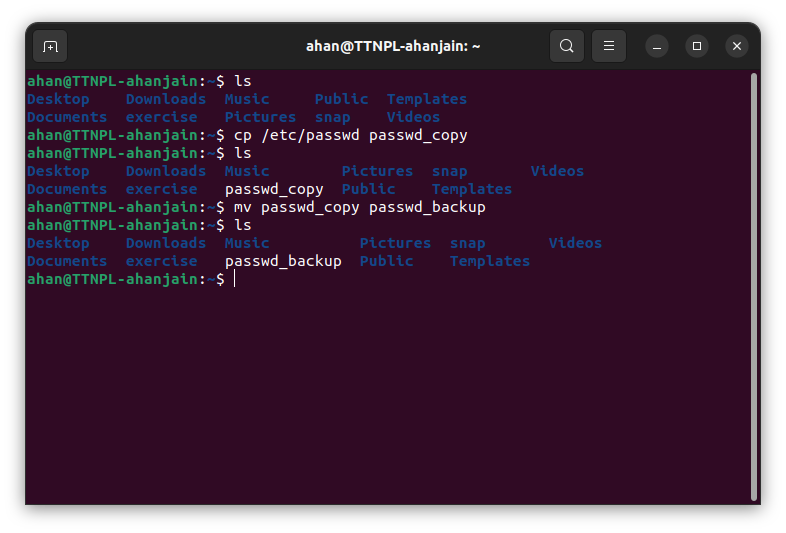
****

**c. Create one file file1.txt containing text "hello world" and save it.**

****

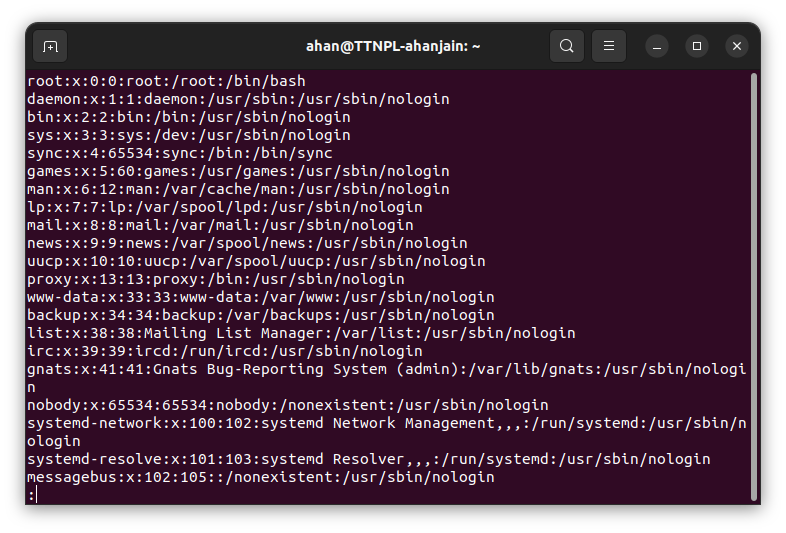
**2. Find a "passwd" file using find command inside /etc. copy these files as passwd\_copy and then rename this file as passwd\_backup.**

****

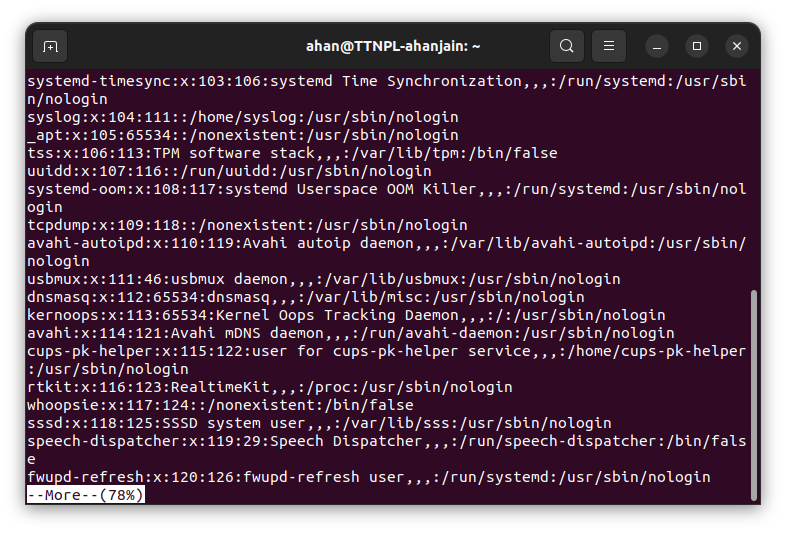
****

**a. Try reading the passwd\_backup file in multiple tools: less,more,cat,strings etc and find the difference in their usage.**

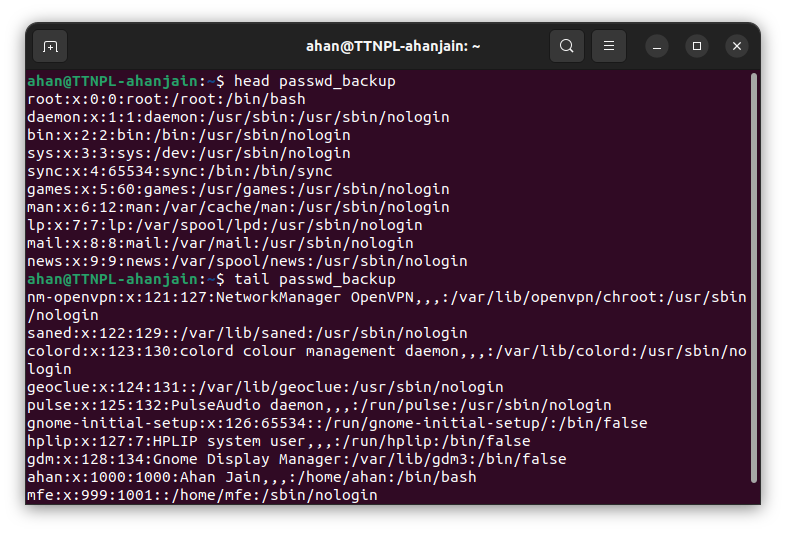
**Less**

****

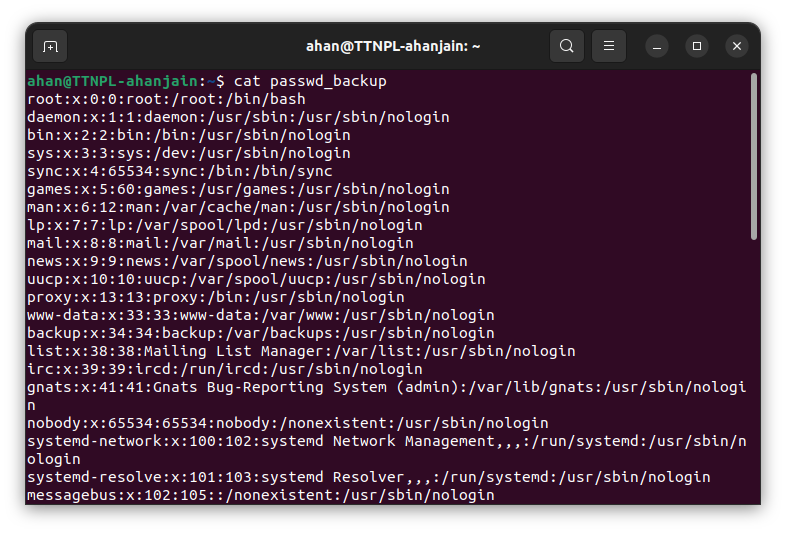
**More**

****

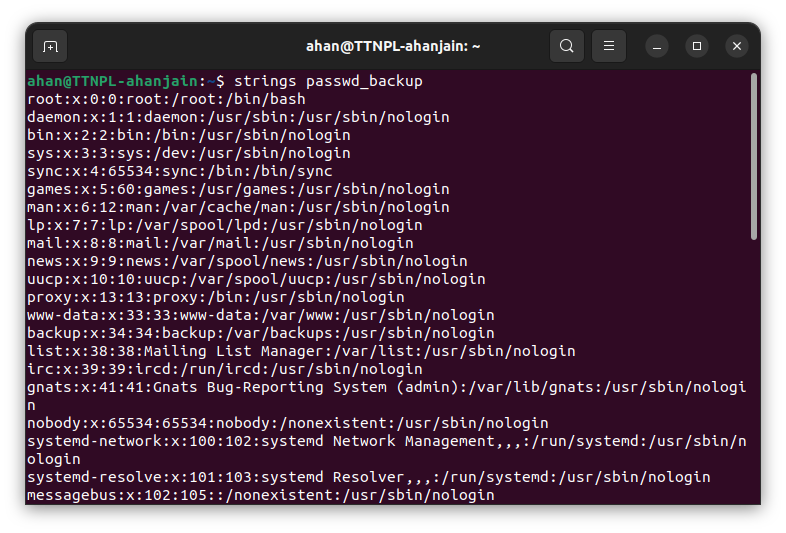
**Tail and Head**

****

**Cat**

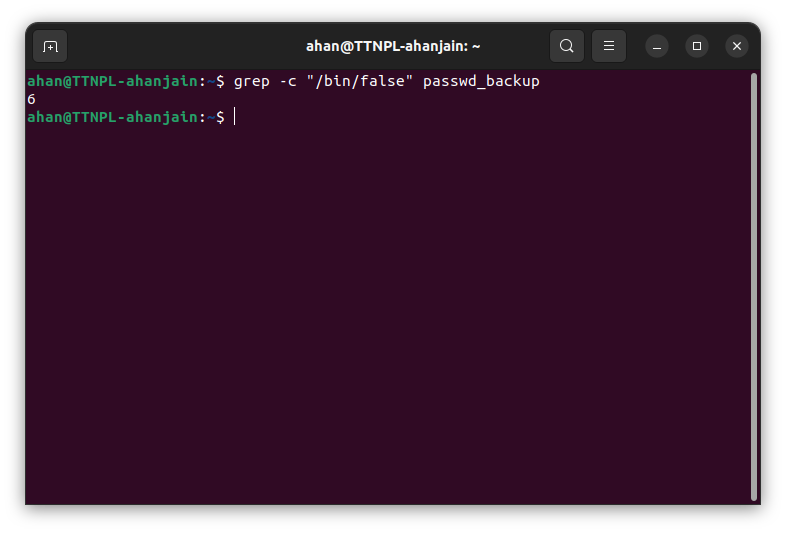
****

**Strings**

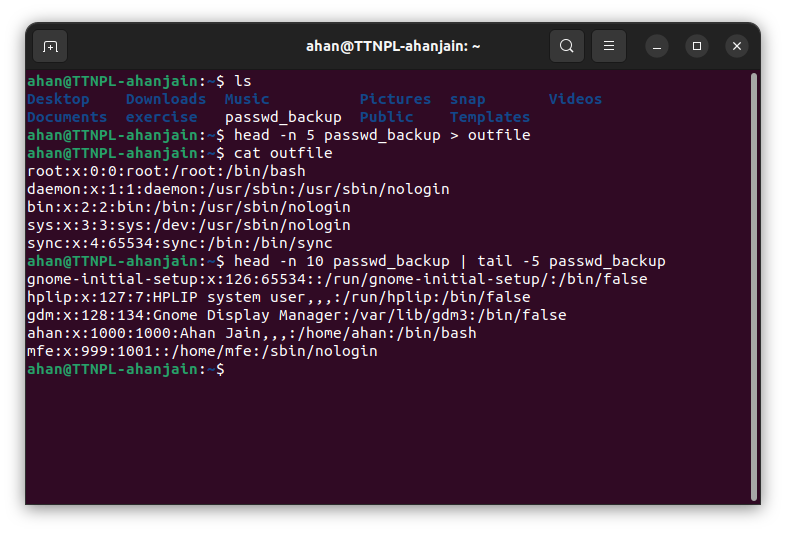
****

| **Less** | View large files interactively |
| --- | --- |
| **More** | View files one screen at a time |
| **Head** | Display first lines of a file |
| **Tail** | Display last lines of a file |
| **Cat** | Concatenate and display files |
| **Strings** | Extract text from files |

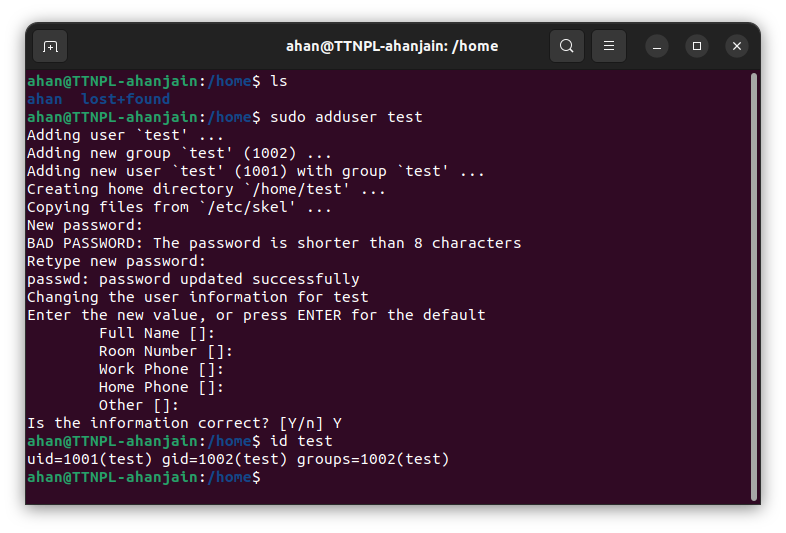
**b. Find out the number of lines in password\_backup containing "/bin/false".**

****

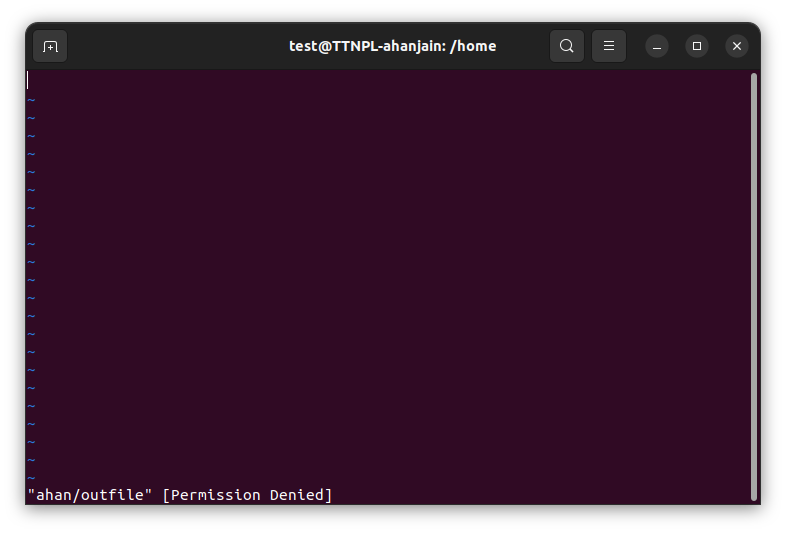
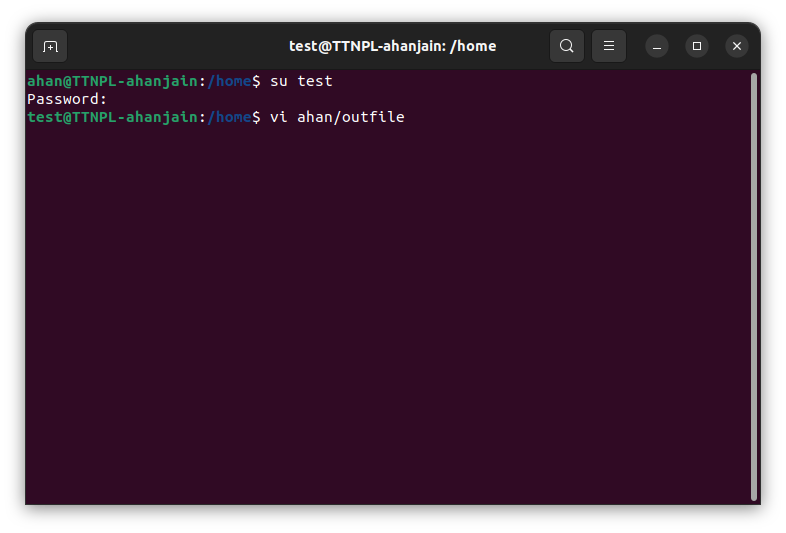
**c. Get the first 5 lines of a file “password\_backup” and Redirect the output of the above commands into file "output". Also, get the lines 6-10 from the above file.**

****

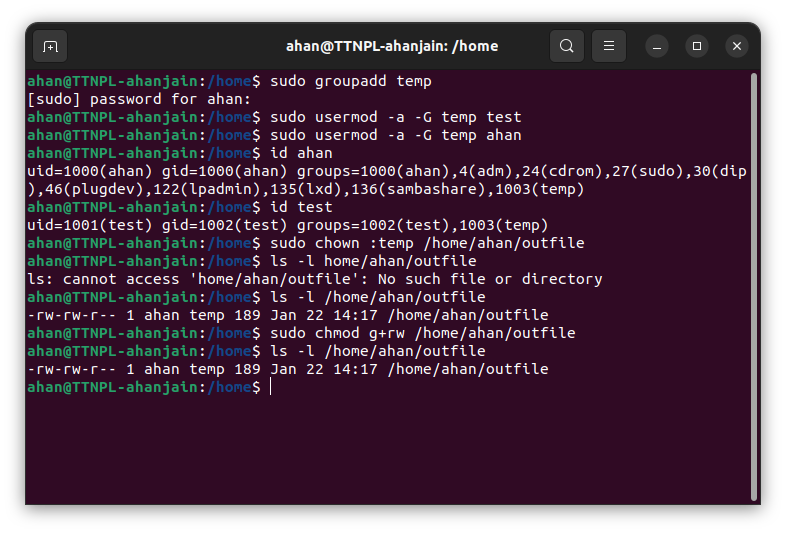
**3. Create a "test" user, create its password and find out its uid and gid.**

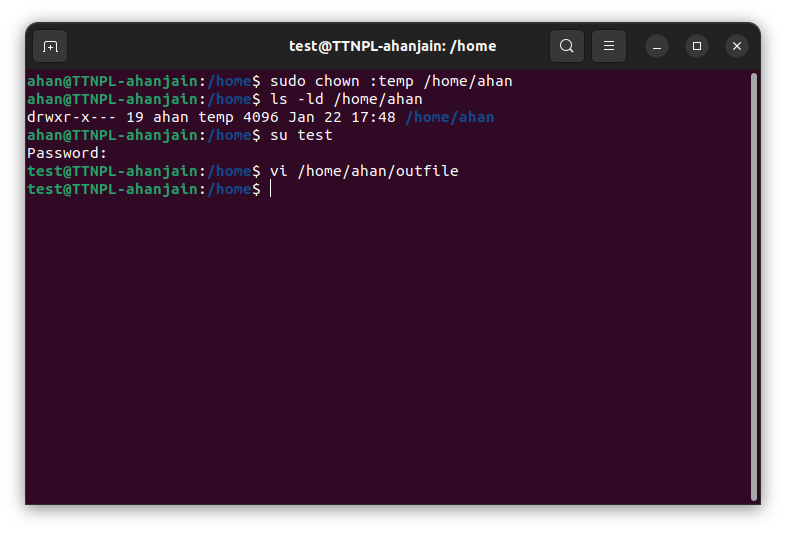
****

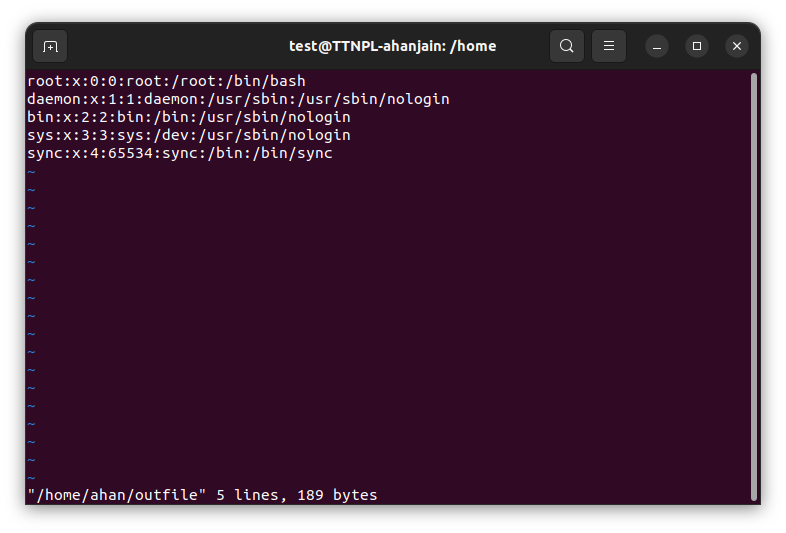
**a. Login as test user and edit the "output" file created above. Since the permission won't allow you to save the changes. Configure such that the test user can edit it.**

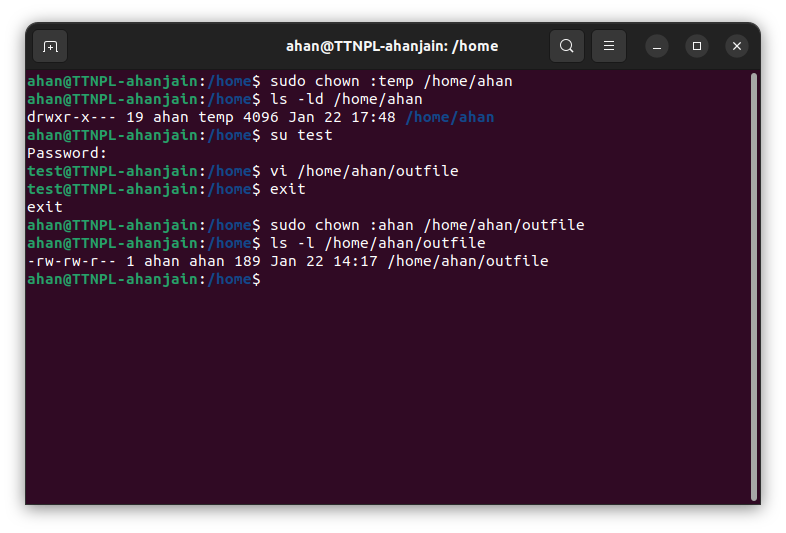
****

**b. Add the group owner of the "output" file as the secondary group of test user and check/change the "output" file permission if it is editable by group. Once done revert the changes.**

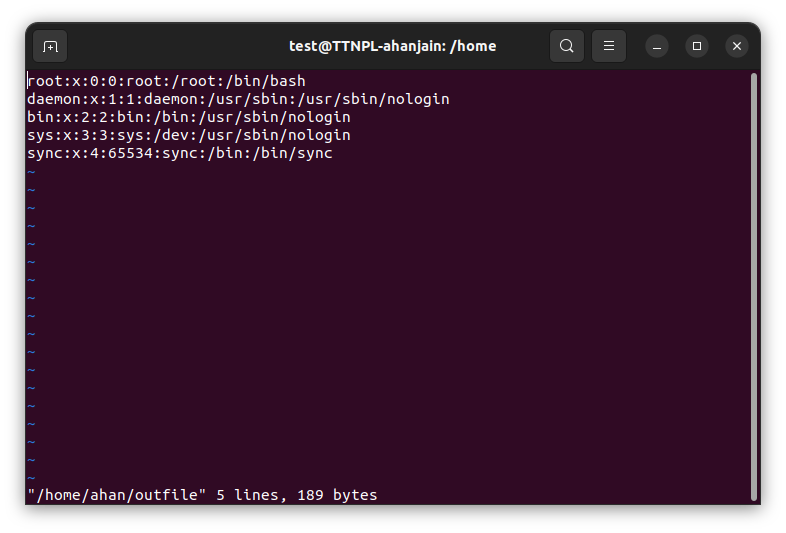
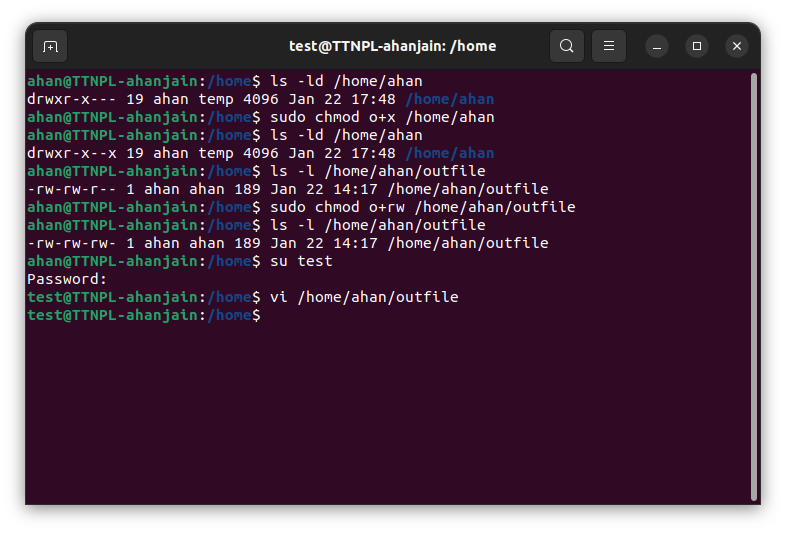
****

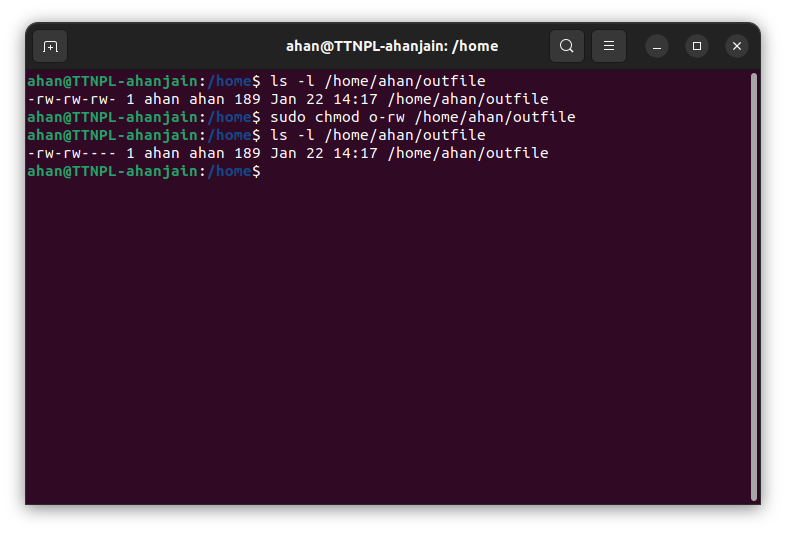
****

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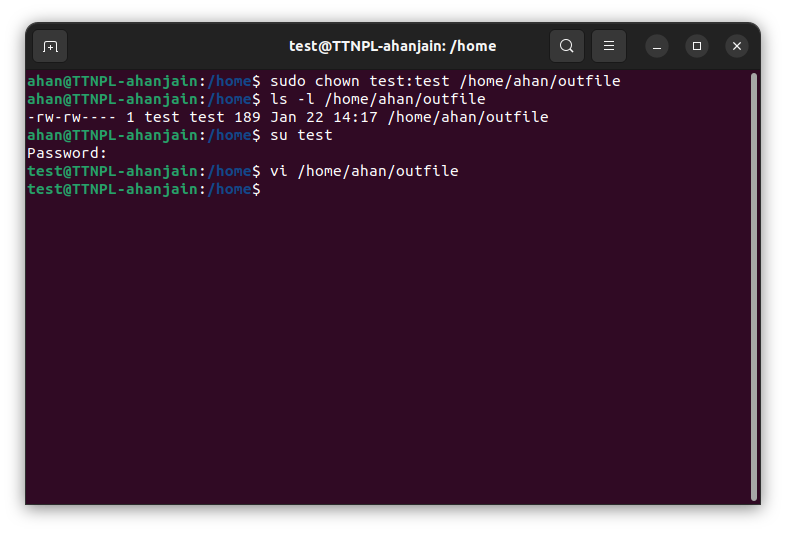
****

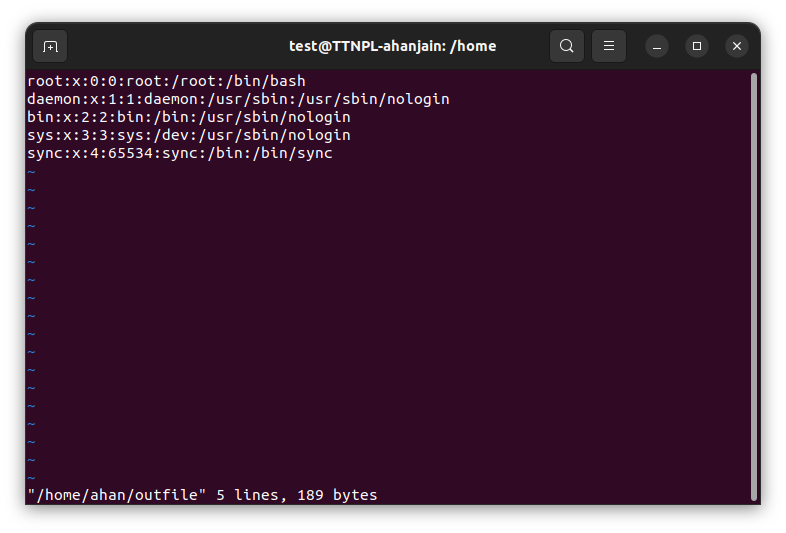
**c. Make the file editable to the world so that test user can access it. Revert the changes after verification**

****

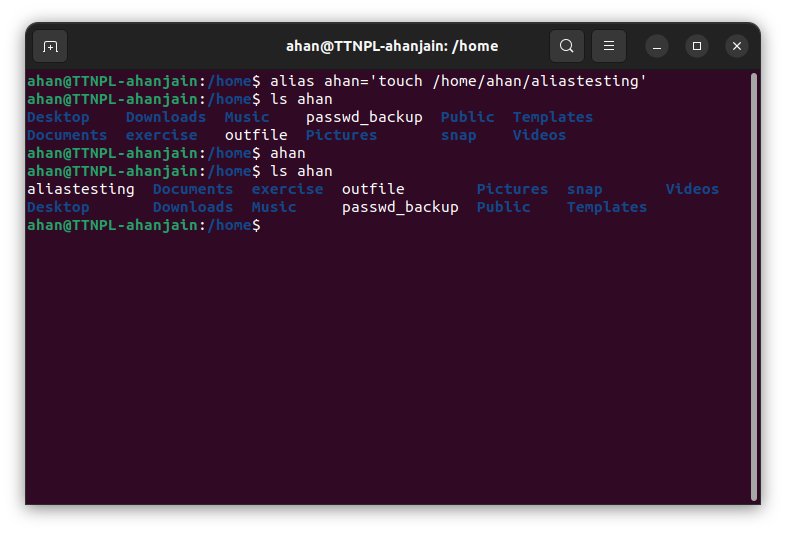
****

**d. Change the ownership to edit the file.**

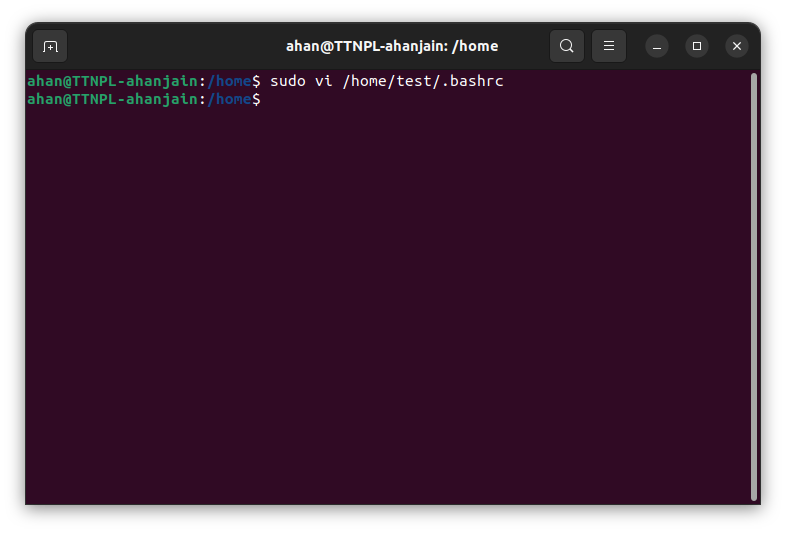
****

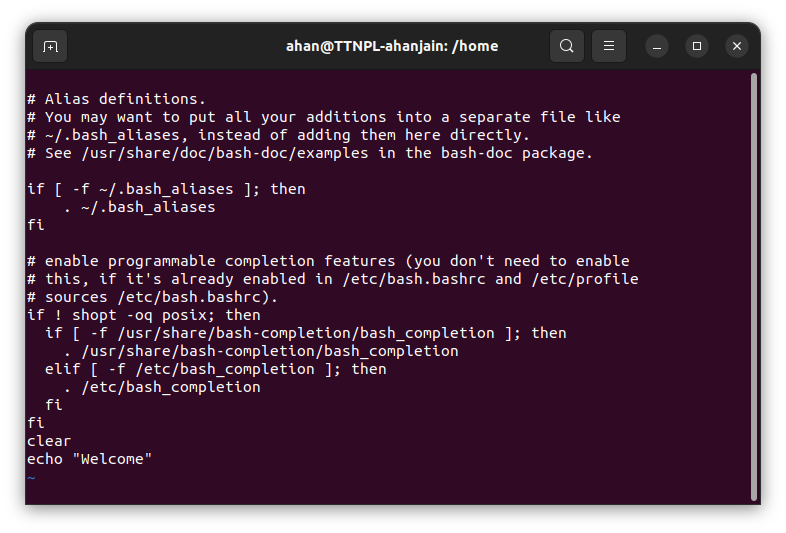
****

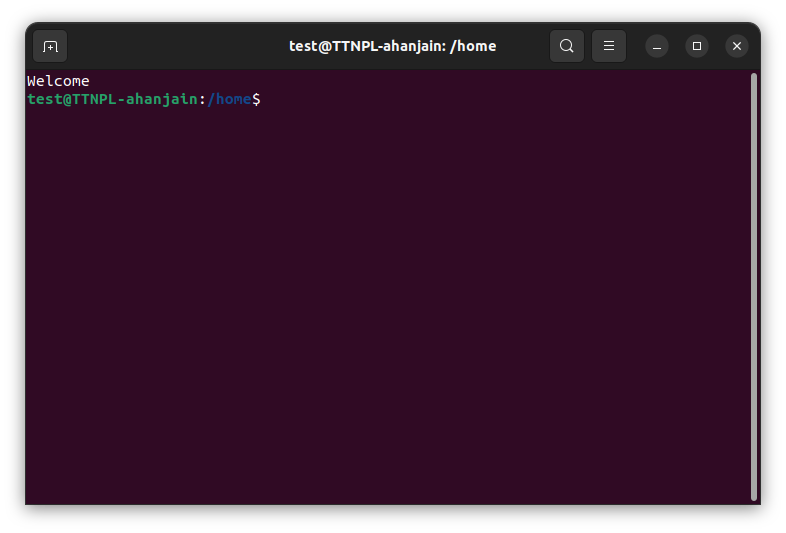
**11. Create an alias with your name so that it creates a file as "/tmp/aliastesting"**.

****

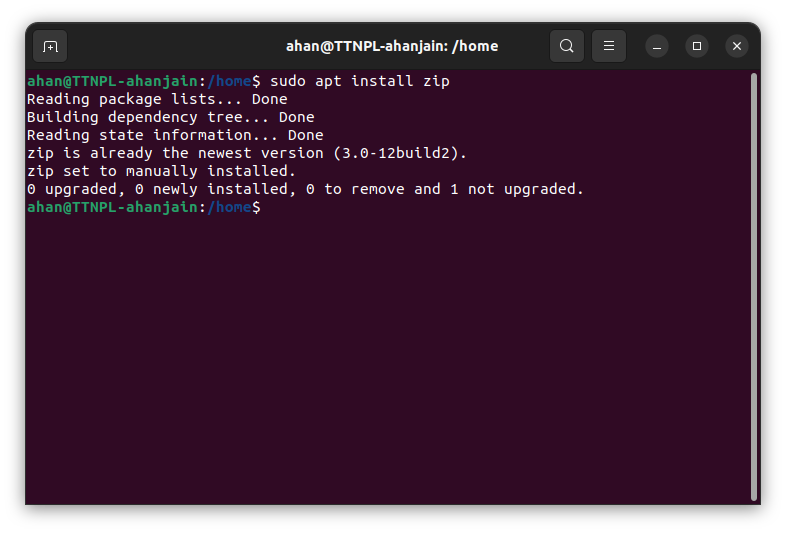
**12. Edit ~/.bashrc file such that when you change to "test" user it should clear the screen and print "Welcome".**

****

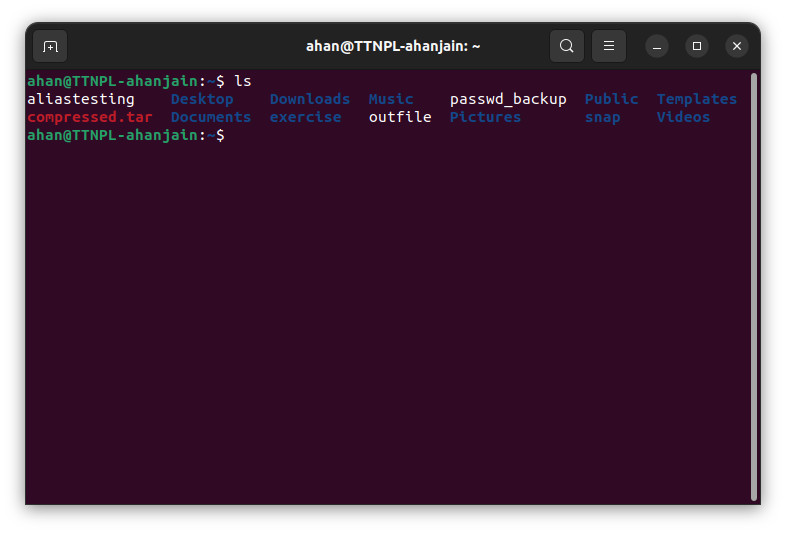
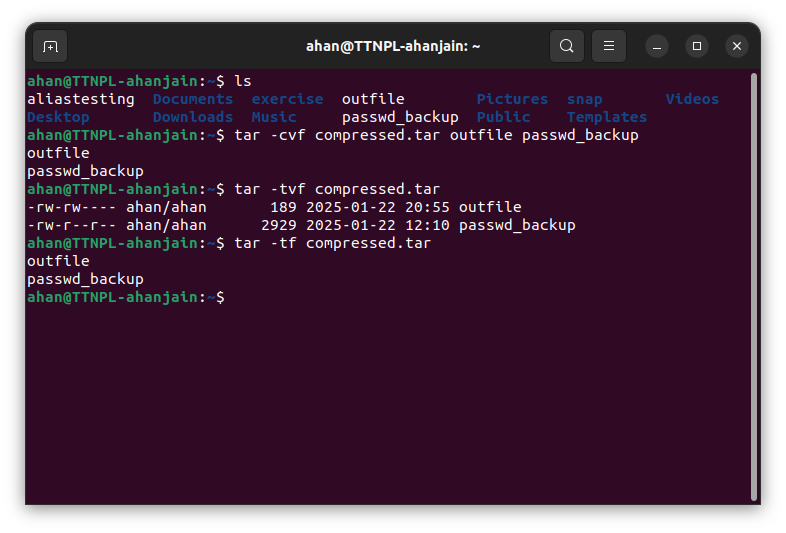
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****

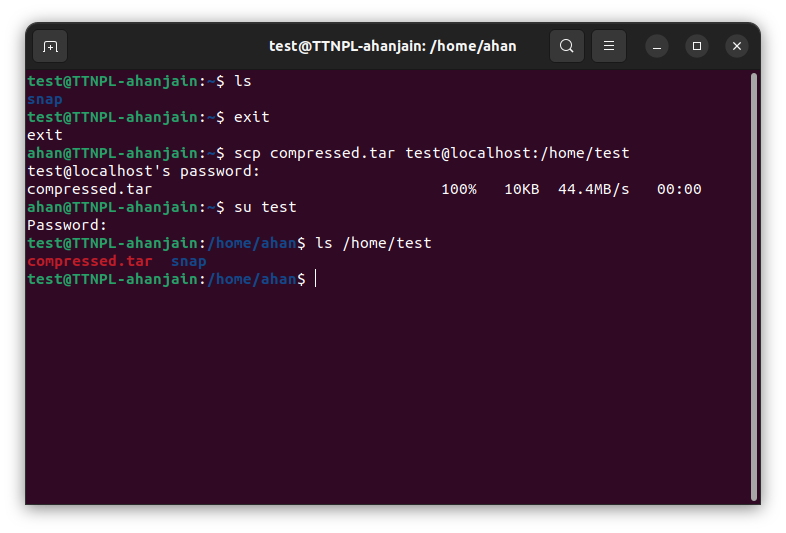
**13. Install “zip” package.**

****

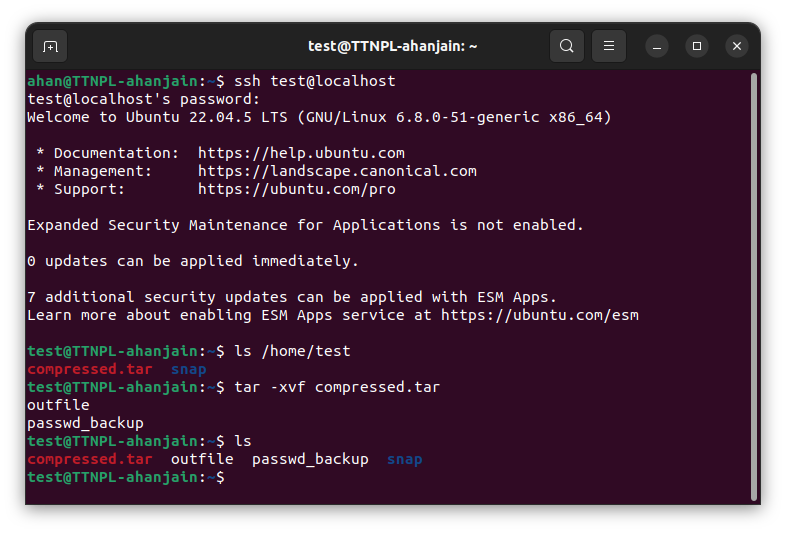
**14. Compress "output" and "password\_backup" files into a tar ball. List the files present inside the tar created.**

****

**15. scp this file to test user home location.**

****

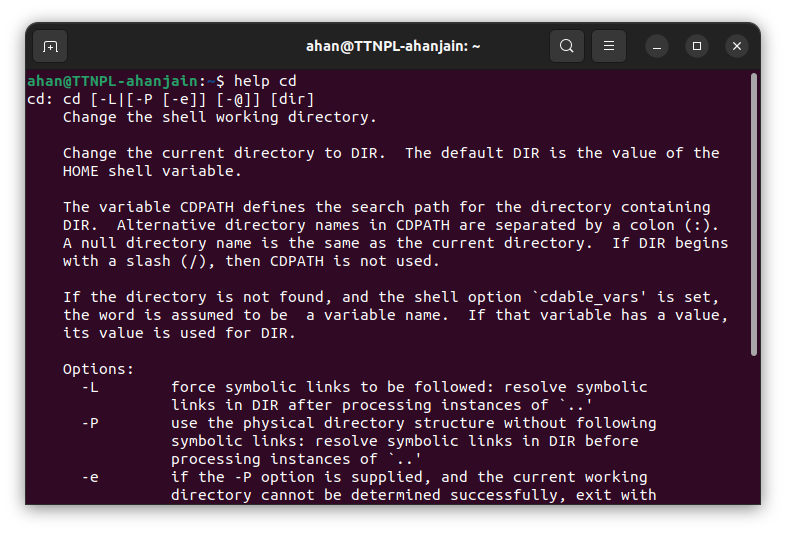
**16. Unzip this tar bar by logging into the remote server**

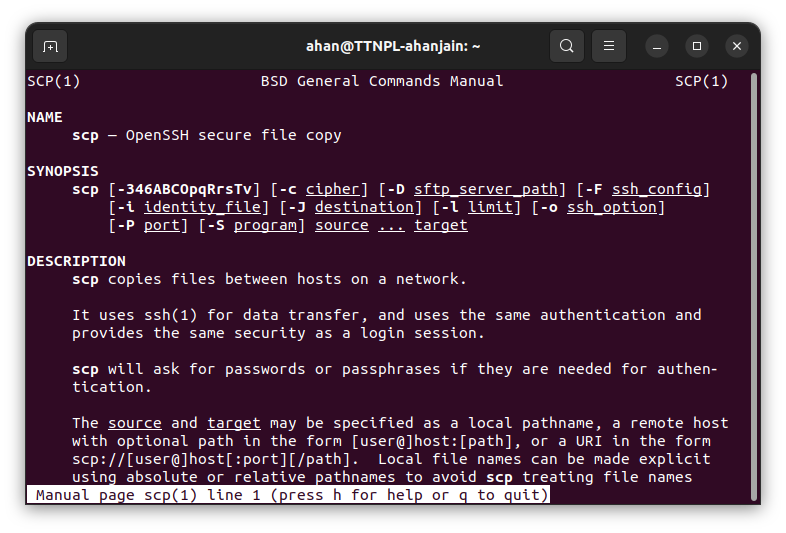
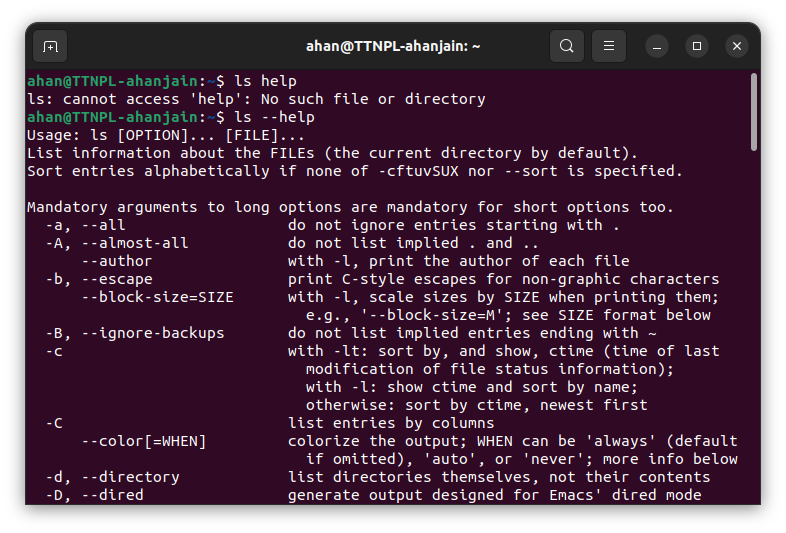
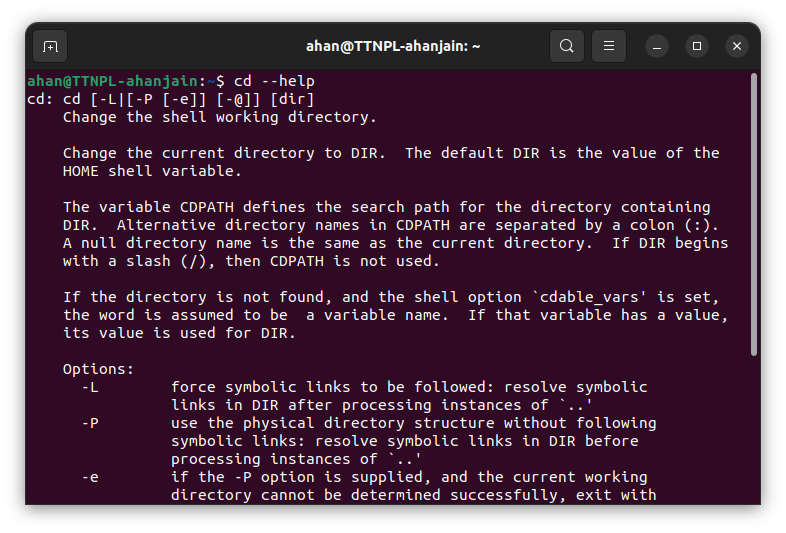
****

**17. Download(via cli) any image from web and move(via cli) to test user home location.**

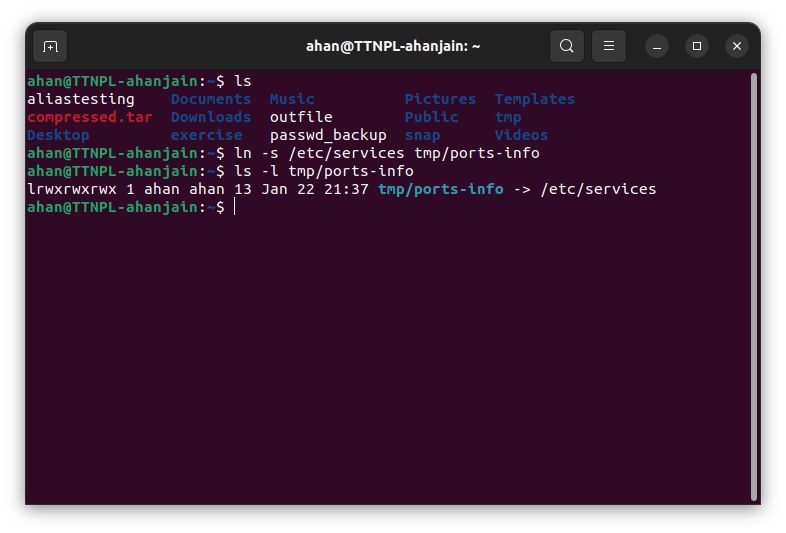
****

**18. How to get help of commands usages.**

****

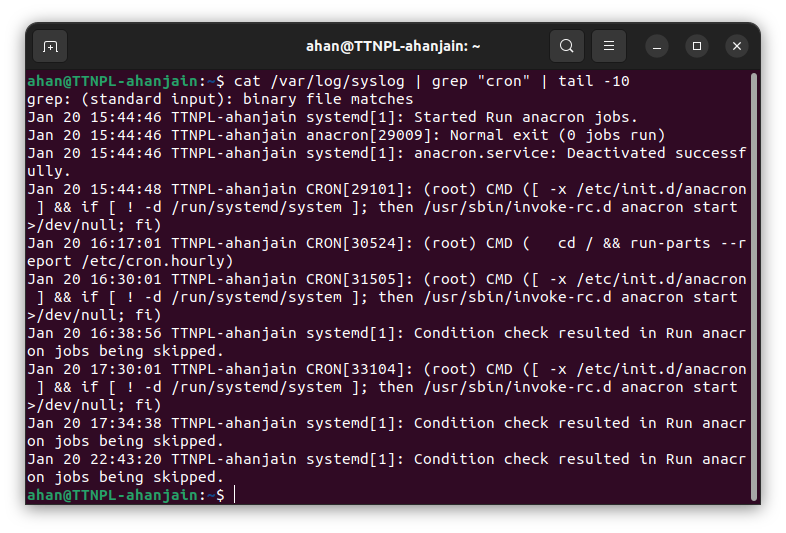
****

**19. Create a symlink of /etc/services into /tmp/ports-info**

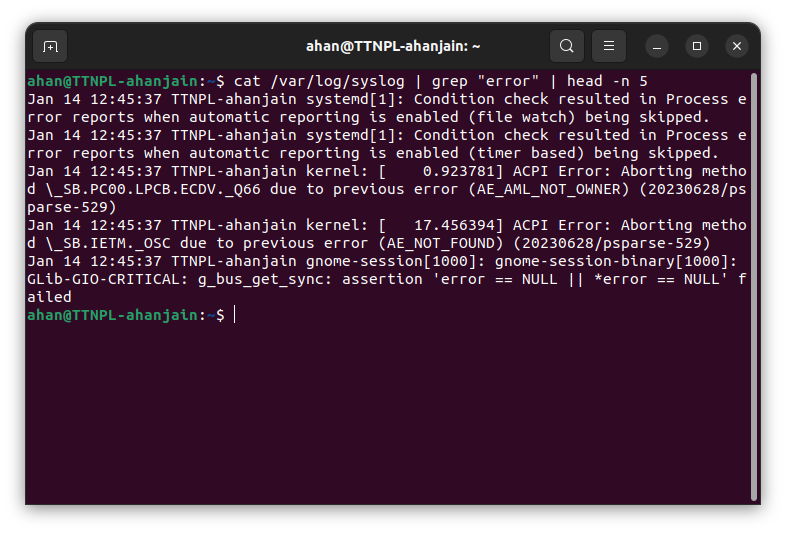
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**21. Analyze the /var/log/syslog file to gather specific information.**

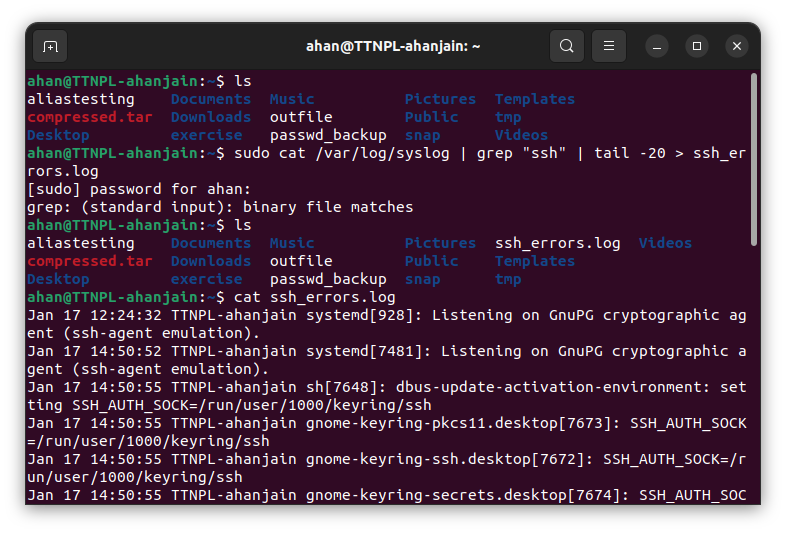
1. **Extract the last 10 lines from the syslog file that mention the word "cron."**

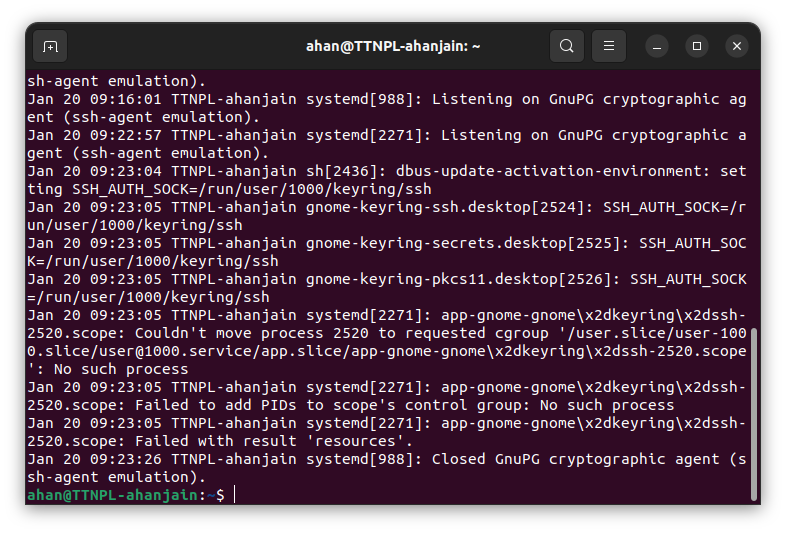
****

**b. Find and display the first 5 lines in the syslog file containing the keyword "error."**

****

**c. Save the last 20 lines of the syslog file containing the word "ssh" to a new file named ssh\_errors.log.**

****

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