Assignment: Bash Shell Basics

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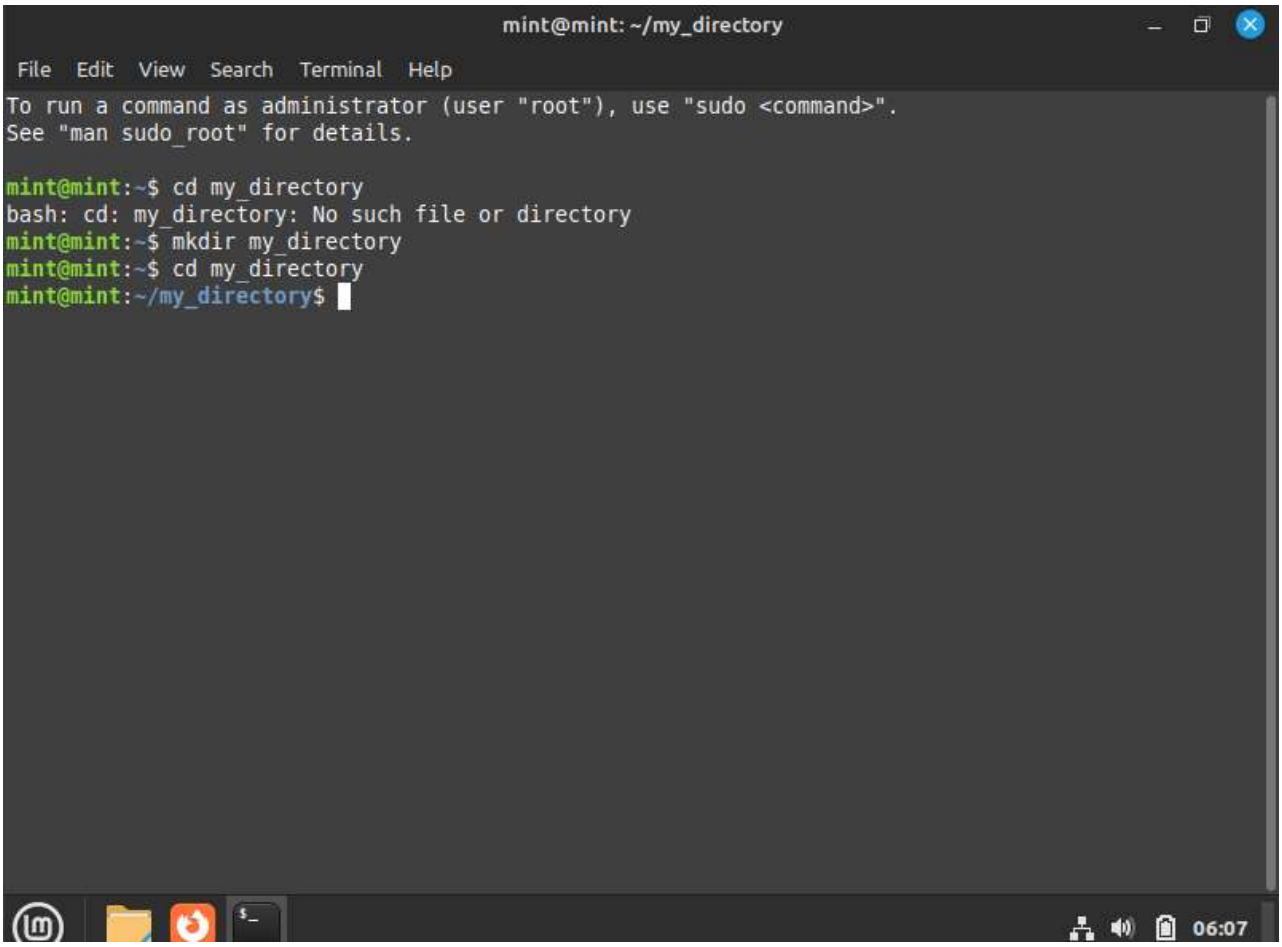
Task 1: File and Directory Manipulation

1. Create a directory called "my_directory".

Mkdir my_directory

2. Navigate into the "my_directory".

cd my_directory

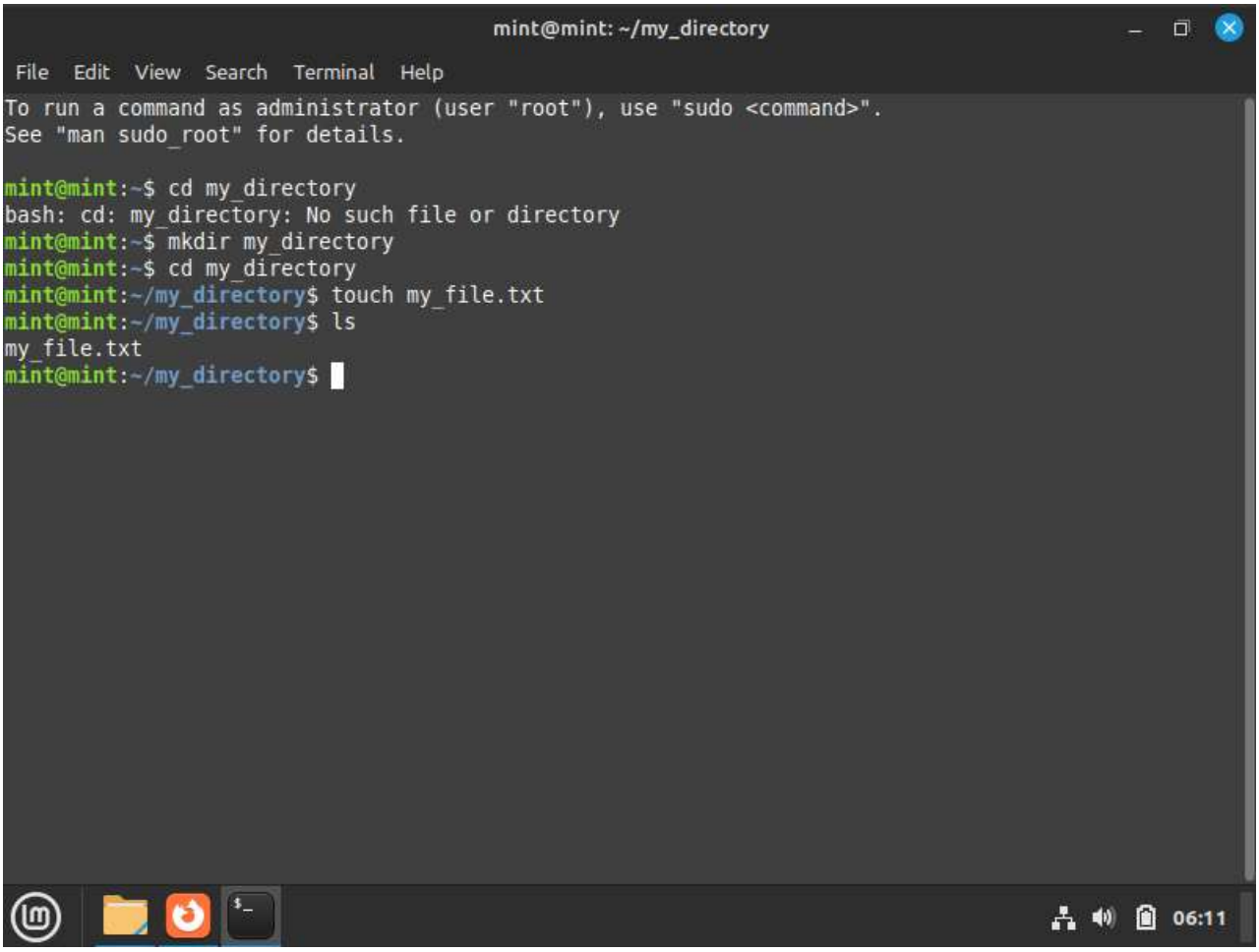


3. Create an empty file called "my_file.txt".

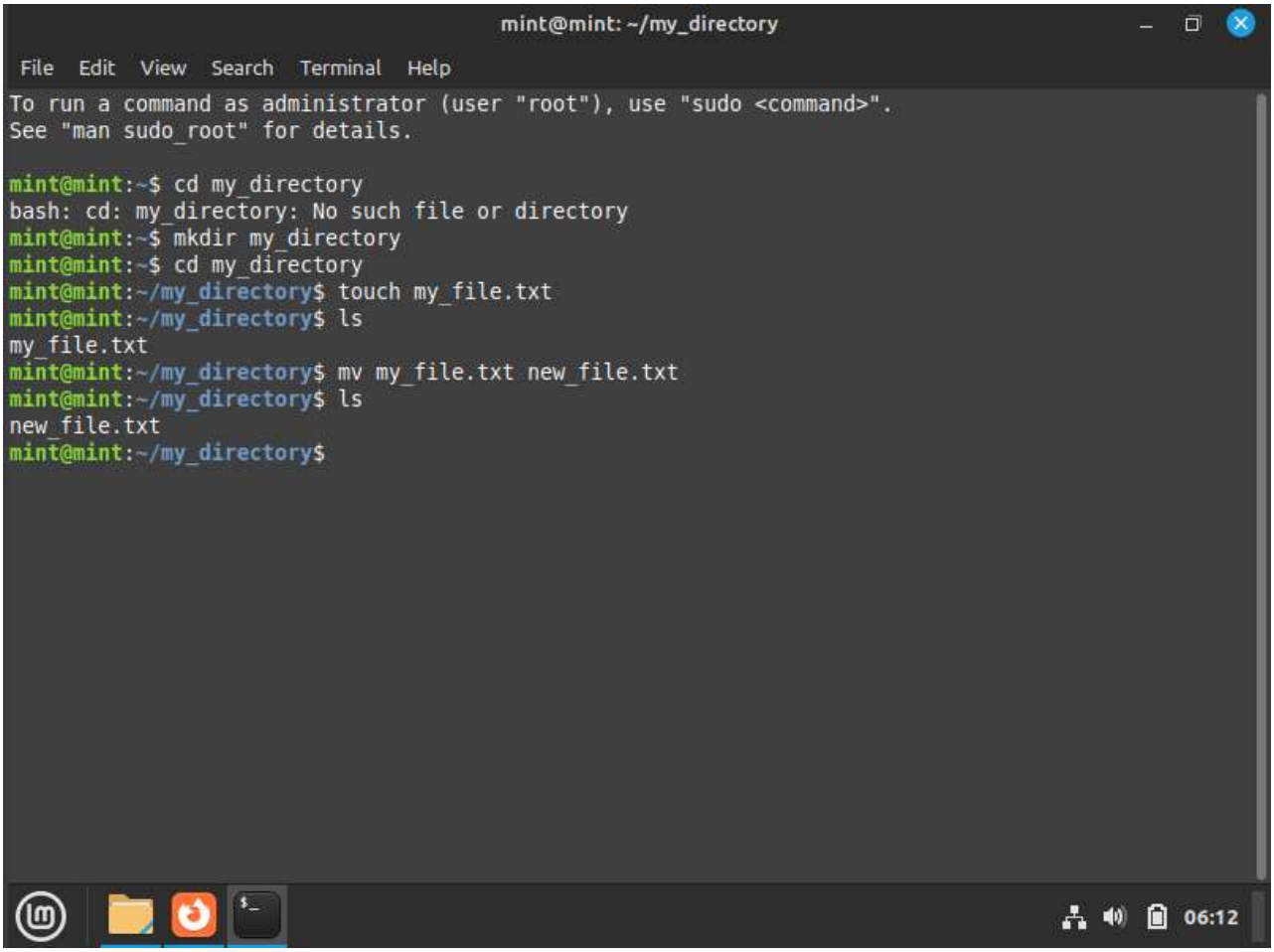
Touch my_file.txt

4. List all the files and directories in the current directory.

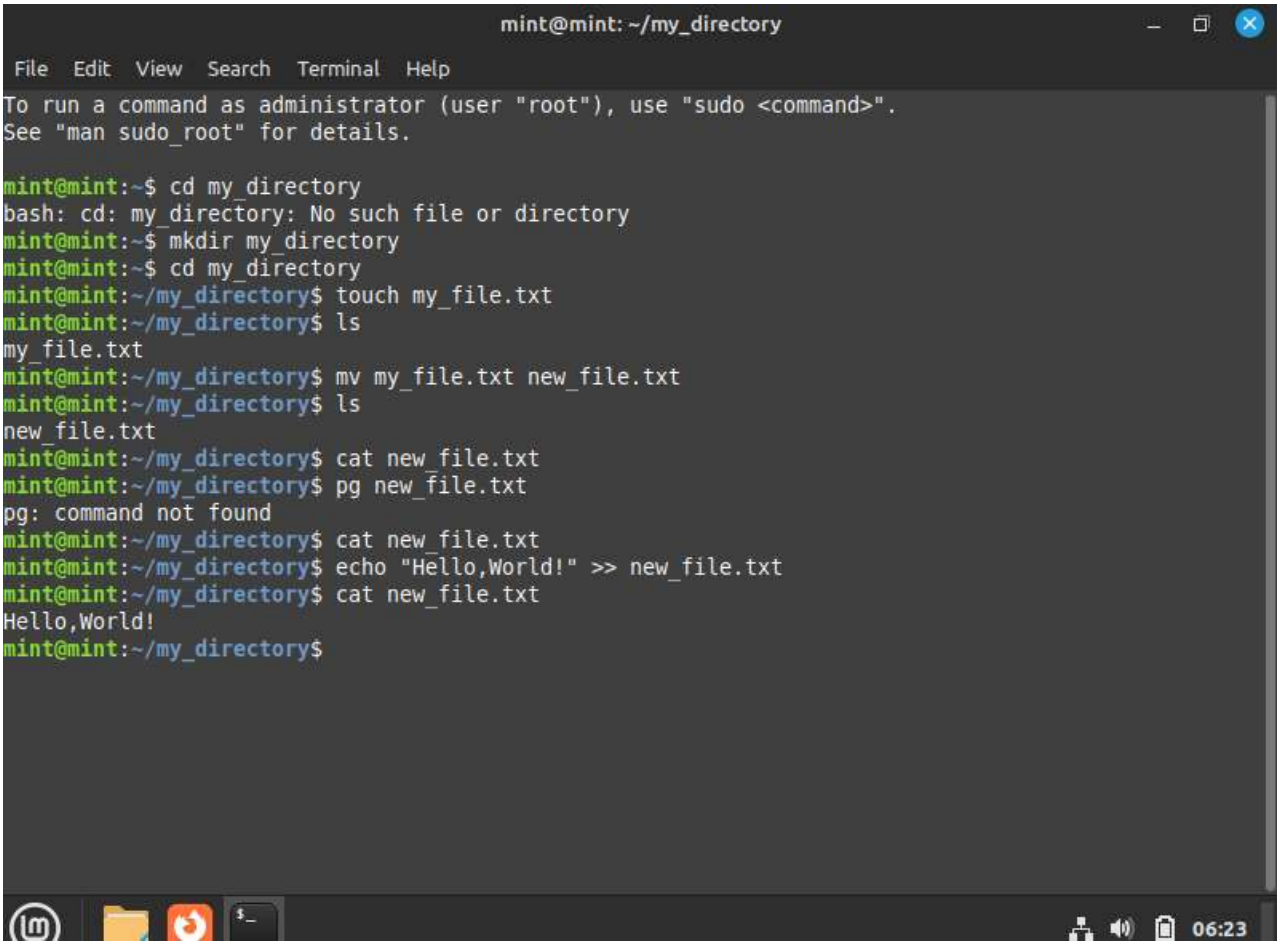
ls



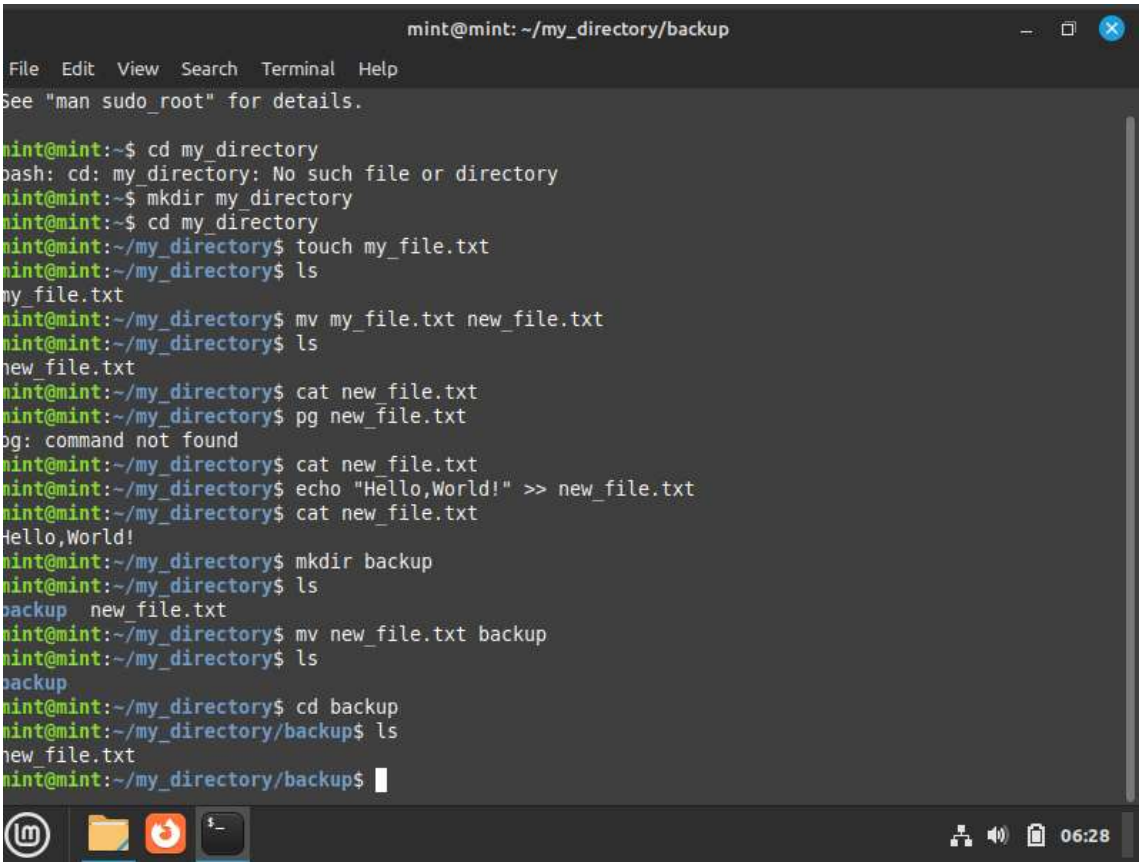
5. Rename "my_file.txt" to "new_file.txt".
   Mv my_file.txt new_file.txt



6. Display the content of "new_file.txt" using a pager tool of your choice.
   Cat new_file.txt
7. Append the text "Hello, World!" to "new_file.txt".
   Echo “Hello,World!” >> new_file.txt

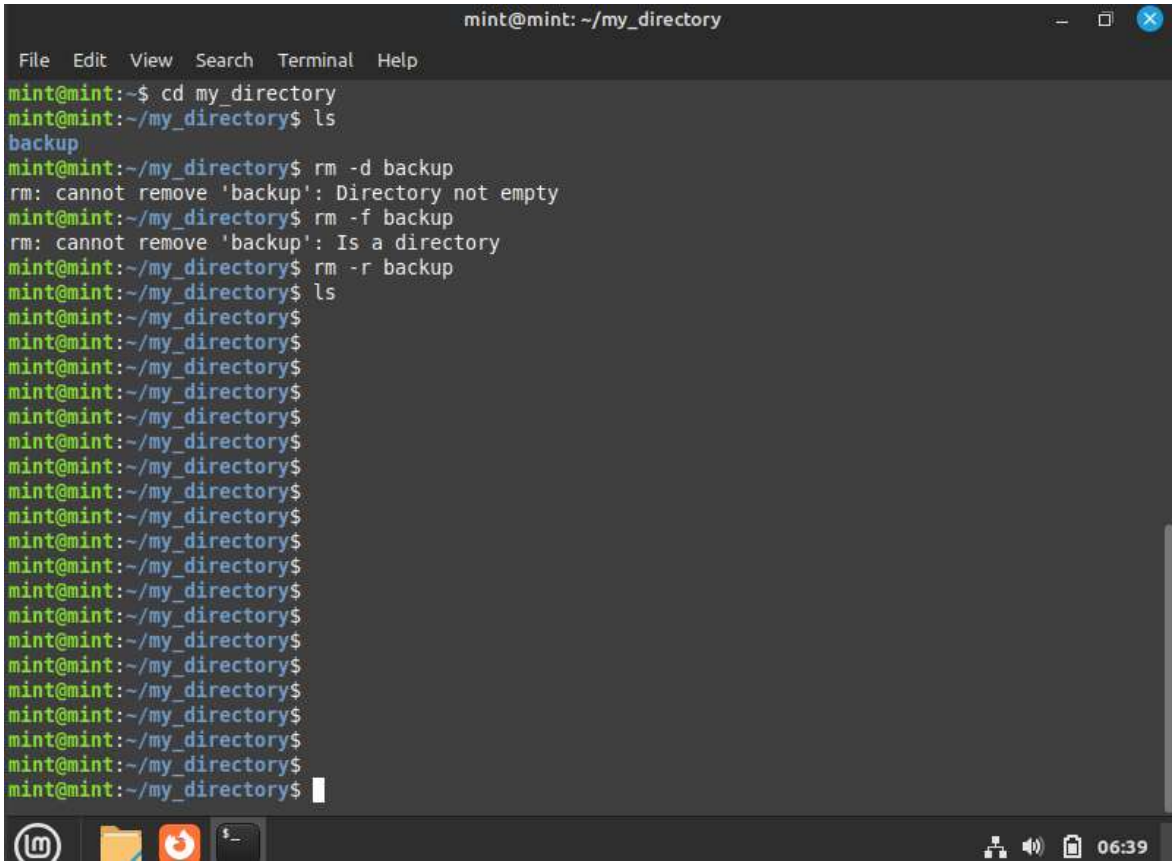


8. Create a new directory called "backup" within "my_directory".
   Mkdir backup
9. Move "new_file.txt" to the "backup" directory.
   Mv new_file.txt backup
10. Verify that "new_file.txt" is now located in the "backup" directory.
    Cd backup
    Ls



11. Delete the "backup" directory and all its contents.

    Rm -r backup



Task 2: Permissions and Scripting

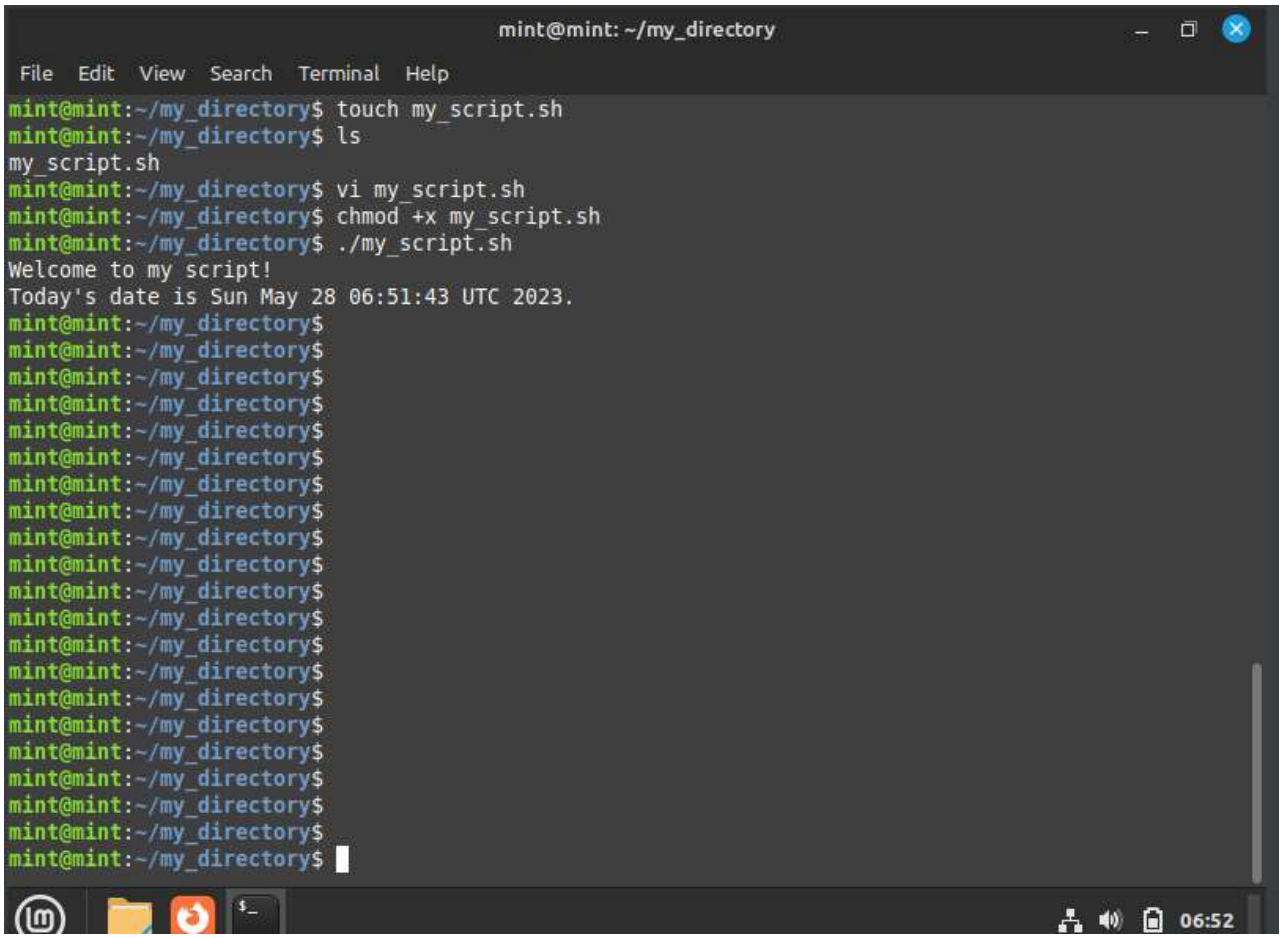
- Create a new file called "my_script.sh".
  Touch my_script.sh

- Edit "my_script.sh" using a text editor of your choice and add the following lines:
  Vi my_script.sh

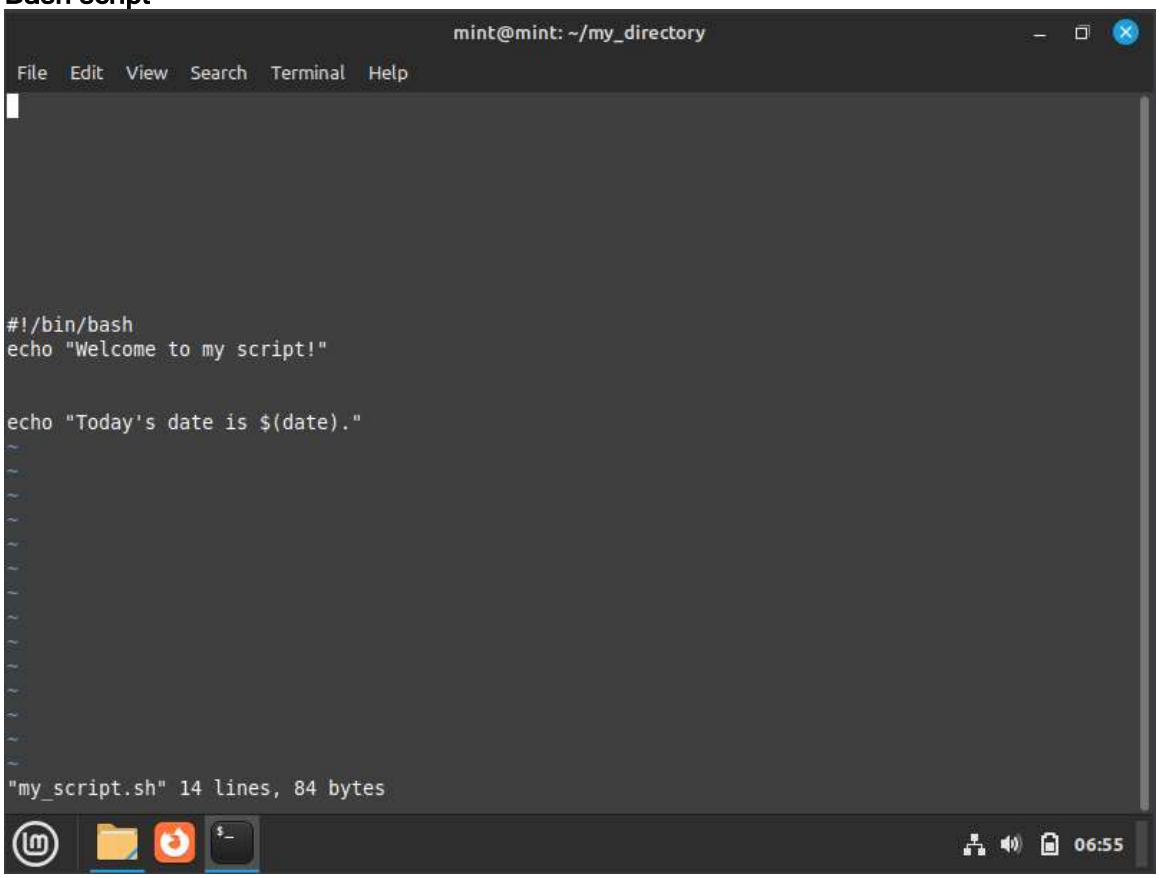
#!/bin/bash
echo "Welcome to my script!"
echo "Today's date is $(date)."
Save and exit the file.

- Make "my_script.sh" executable.

  Chmod +x my_script.sh
- Run "my_script.sh" and verify that the output matches the expected result.
  ./my_script.sh

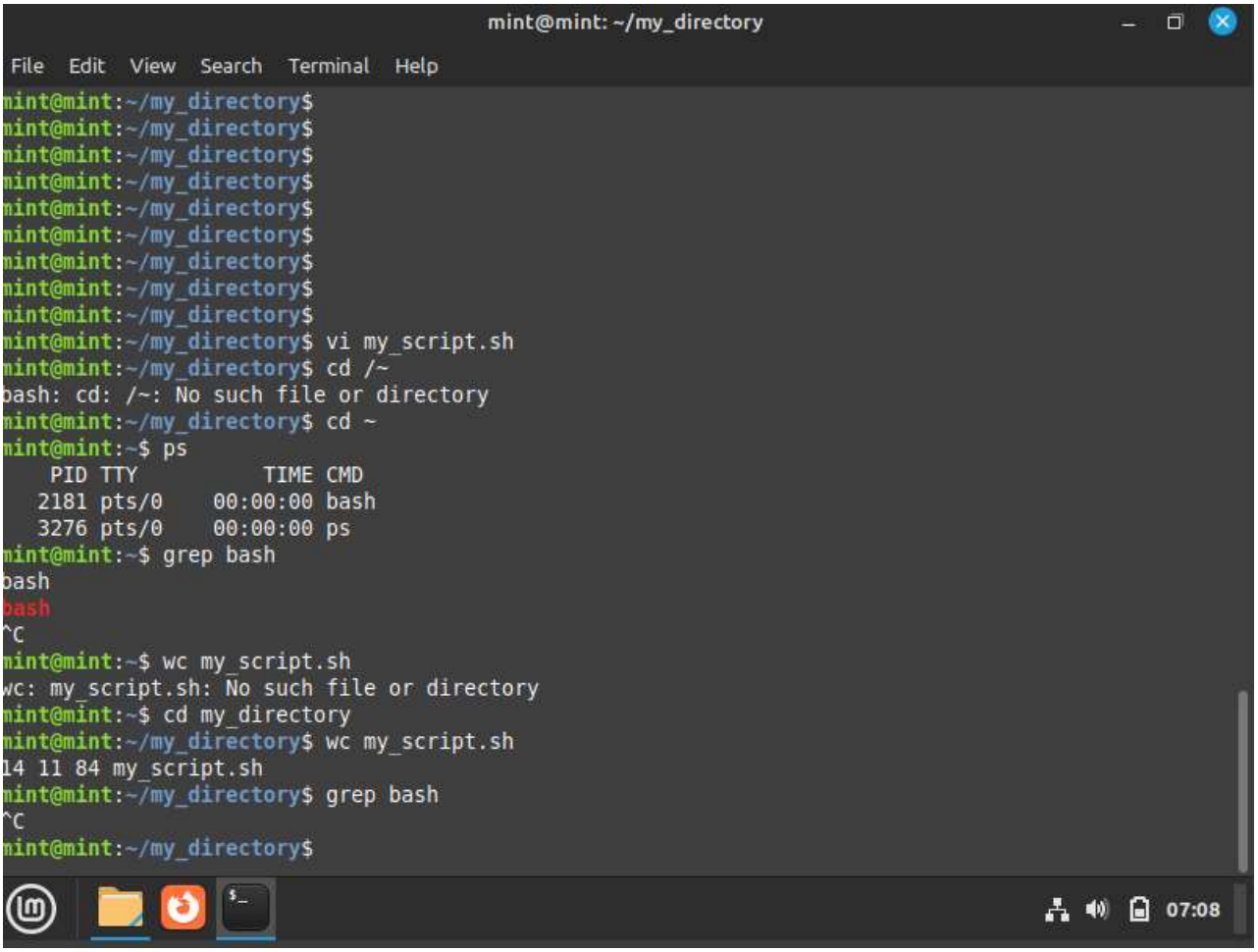


Bash script



Task 3: Command Execution and Pipelines

- List all the processes running on your system using the "ps" command.
- Use the "grep" command to filter the processes list and display only the processes with "bash"in their name.



- Use the "wc" command to count the number of lines in the filtered output.
  Wc my_script.sh

Submission:

Provide a document or text file containing the commands used to complete the tasks above, along with any relevant output or screenshots. Include your explanations or observations where necessary.