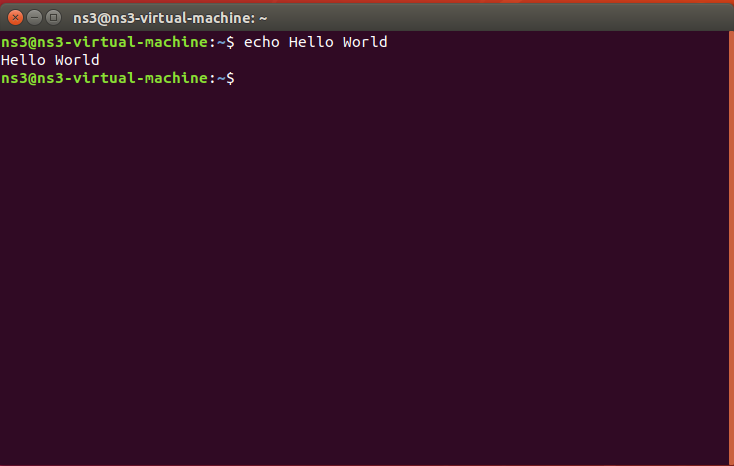
National University of Computer and Emerging Sciences



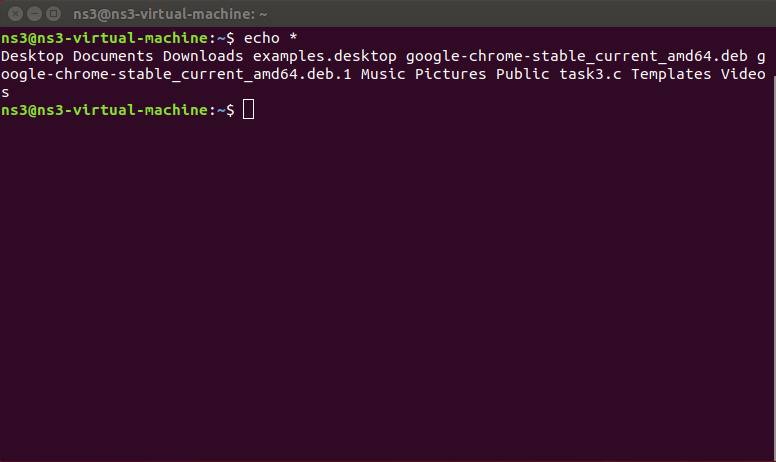
Lab # 01

# Question 01

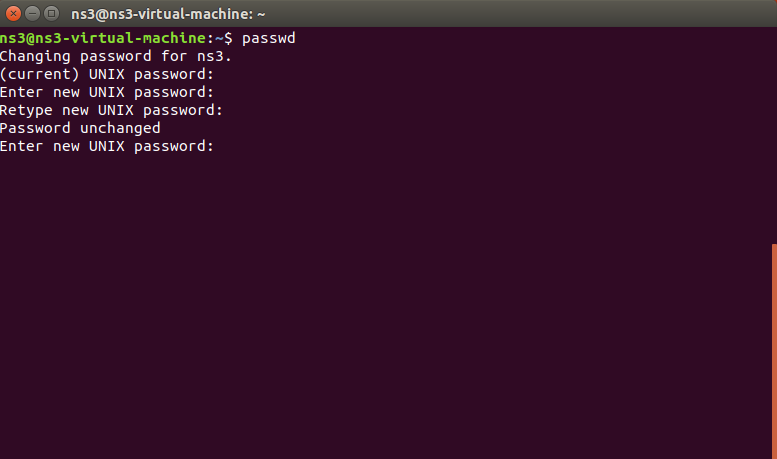
1. echo hello world - Outputs the string "hello world" to the terminal.



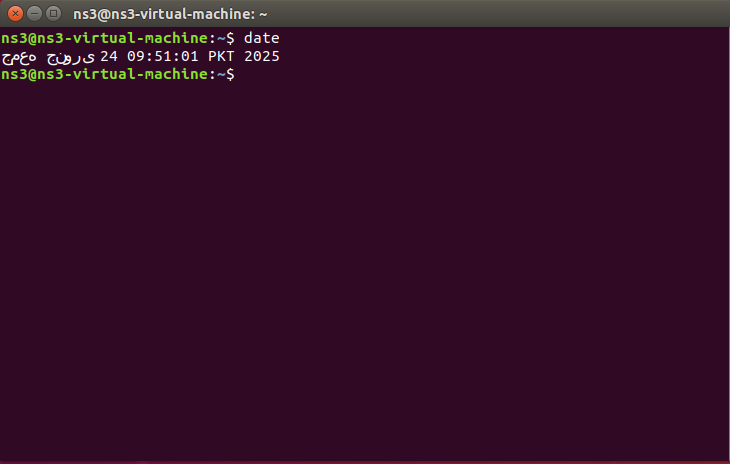
1. echo \* - Displays the names of all files and directories in the current directory.



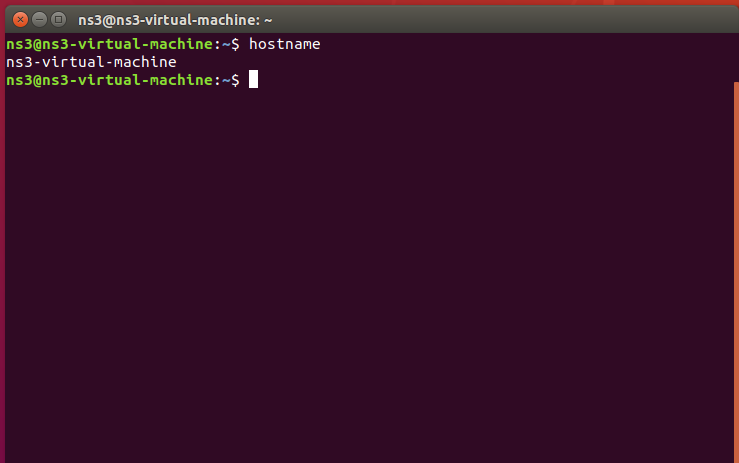
1. passwd - Changes the user's password.



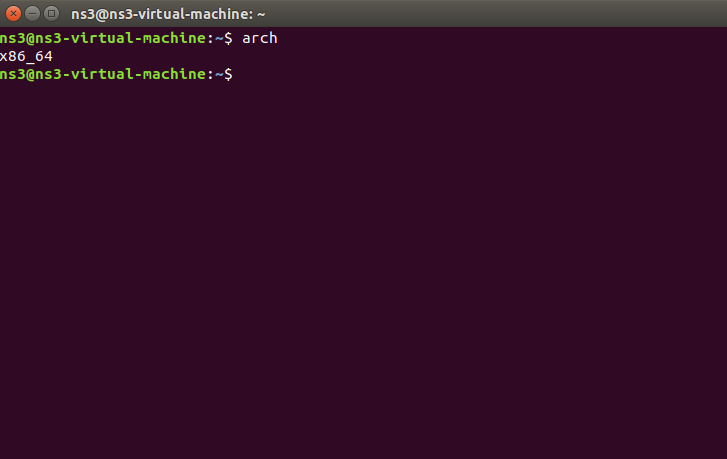
1. date - Displays the current date and time.



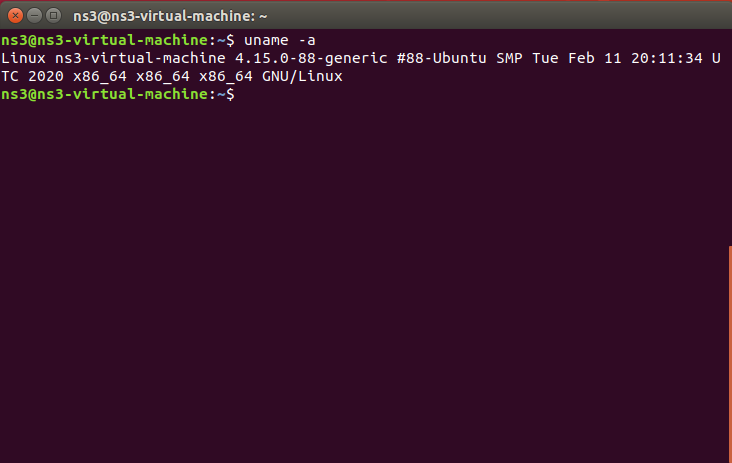
1. hostname - Shows the name of the current host system.



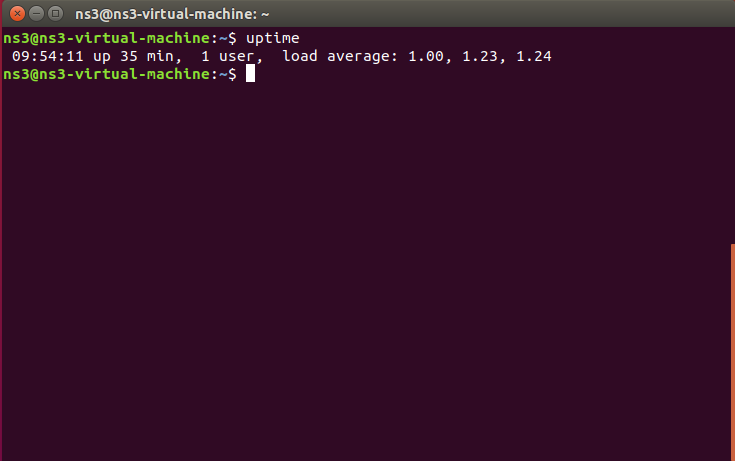
1. arch - Displays the architecture of the system (e.g., x86\_64).



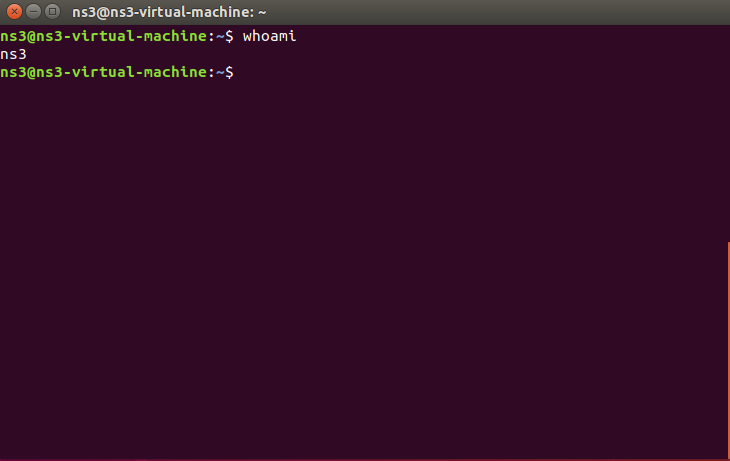
1. uname -a - Prints detailed information about the kernel and system.



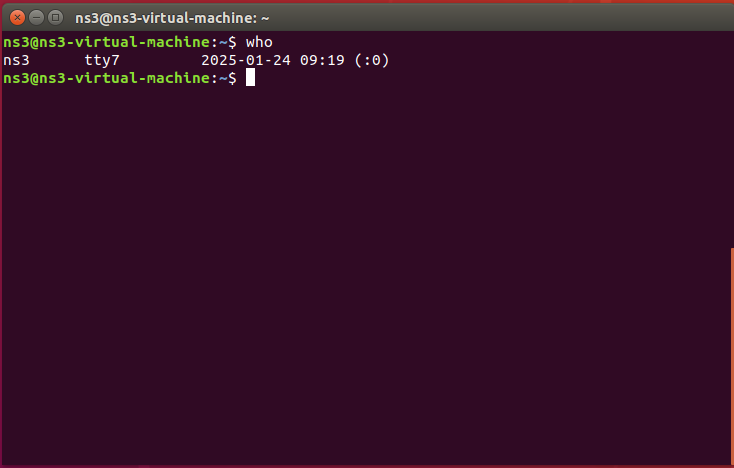
1. uptime - Shows how long the system has been running and its load averages.



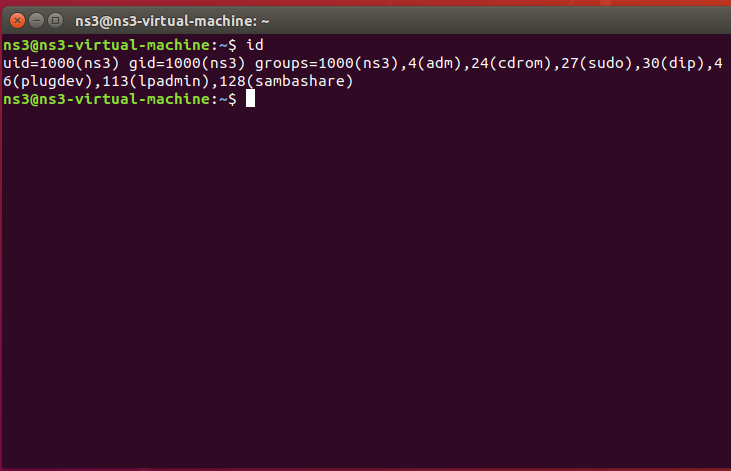
1. whoami - Displays the username of the current user and their terminal.



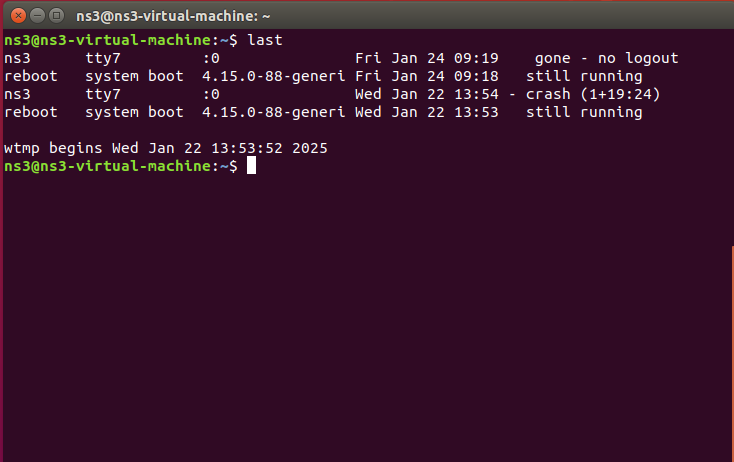
1. who - Lists all users currently logged into the system.



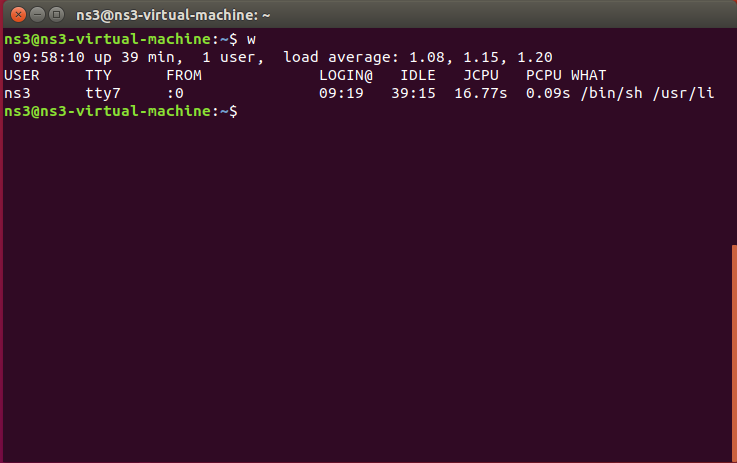
1. id - Displays the user ID (UID) and group ID (GID) of the current user.



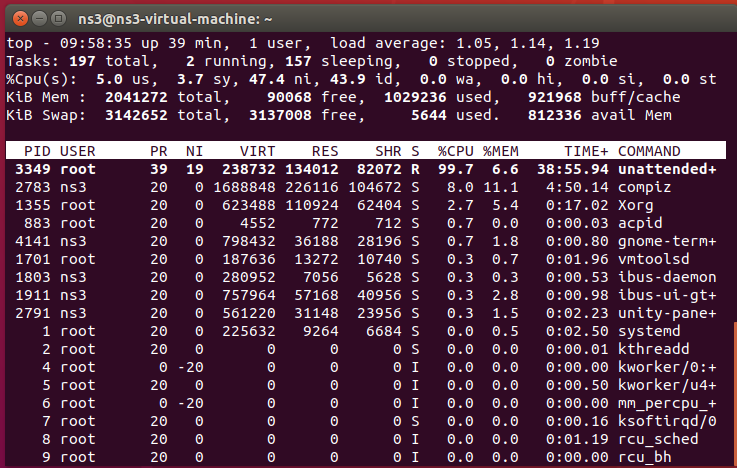
1. last - Shows a list of the most recent login sessions.



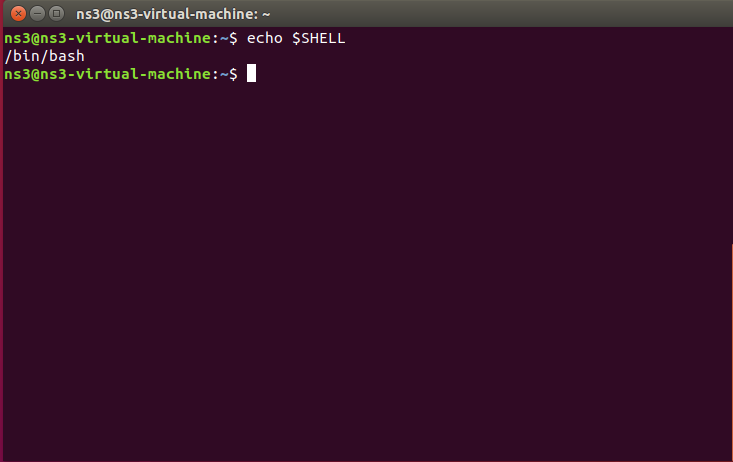
1. w - Displays who is logged on and what they are doing.



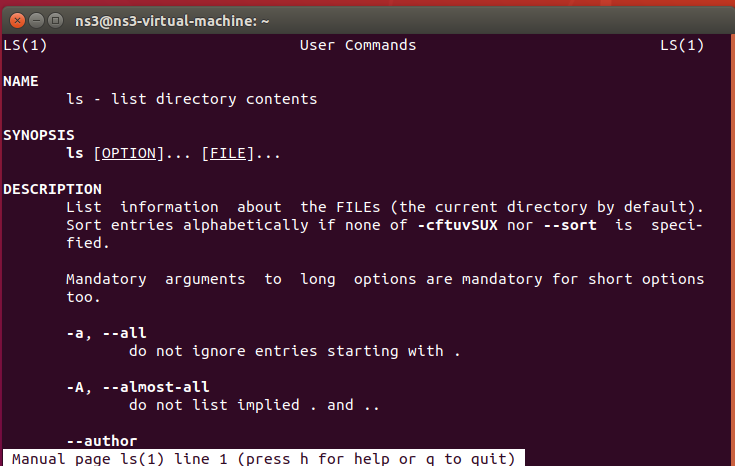
1. top - Provides a real-time view of system processes (press q to quit).



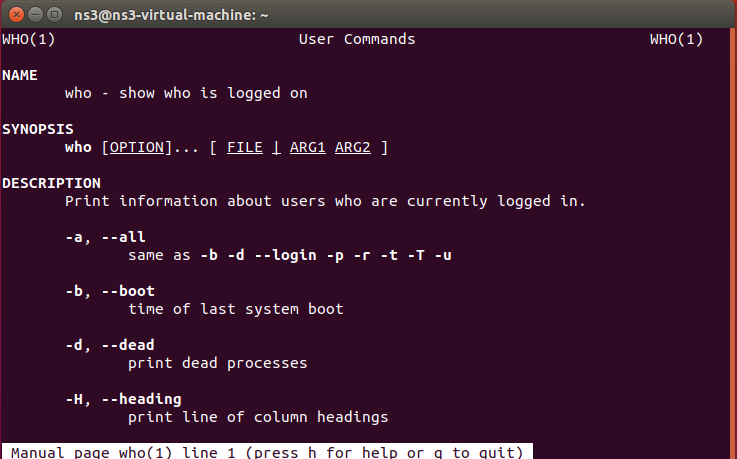
1. echo $SHELL - Outputs the current user's default shell.



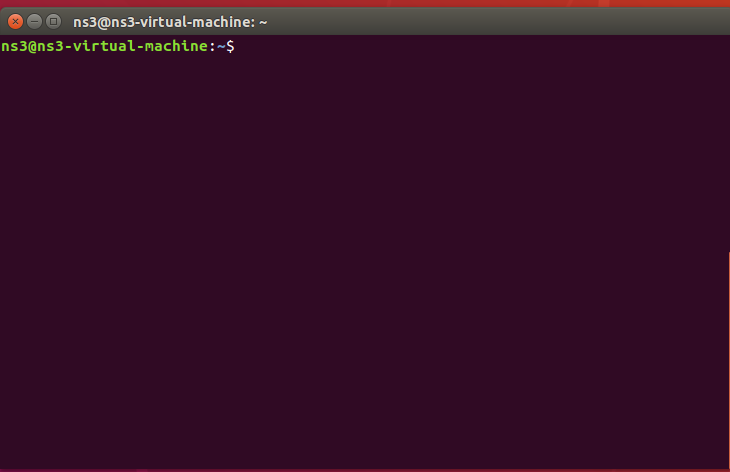
1. man ls - Displays the manual for the ls command (press q to quit).



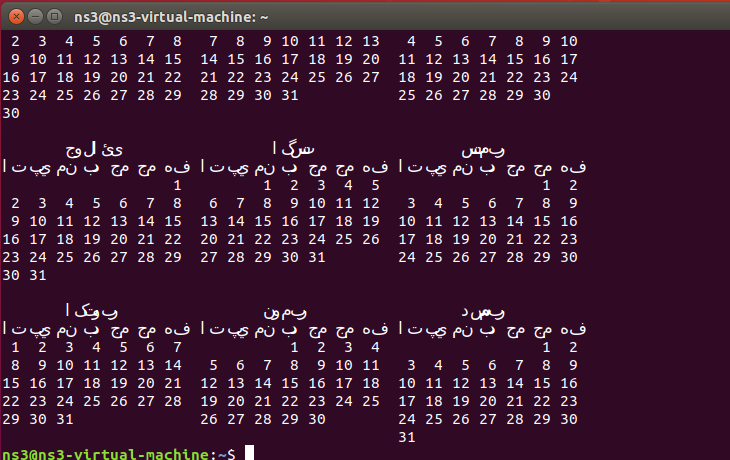
1. man who - Displays the manual for the who command (press q to quit).



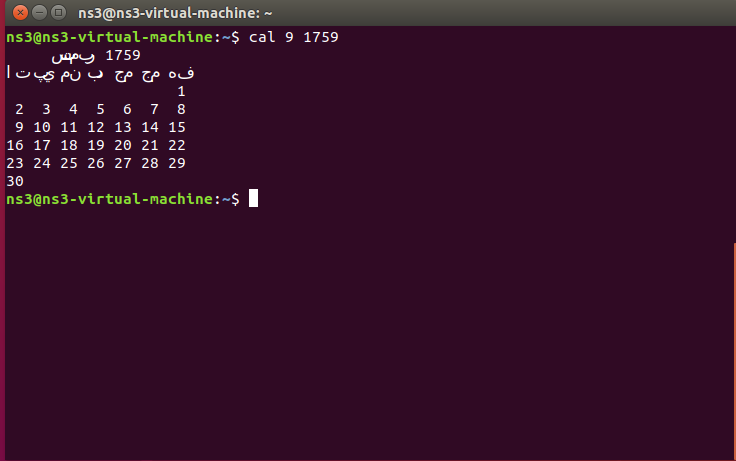
1. clear - Clears the terminal screen.



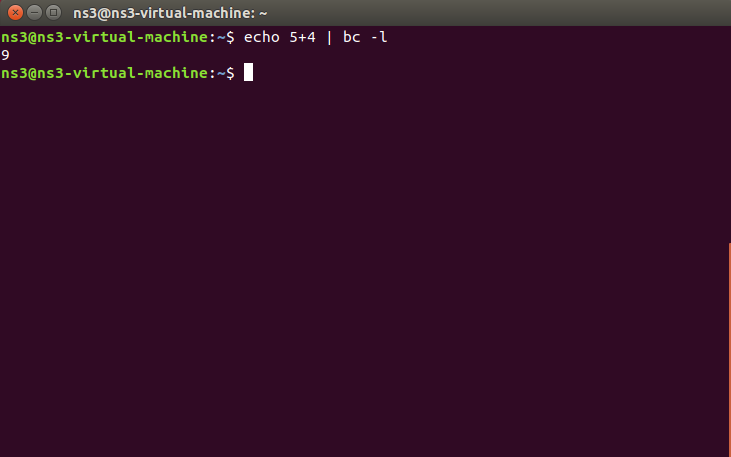
1. cal 2000 - Displays the calendar for the year 2000.



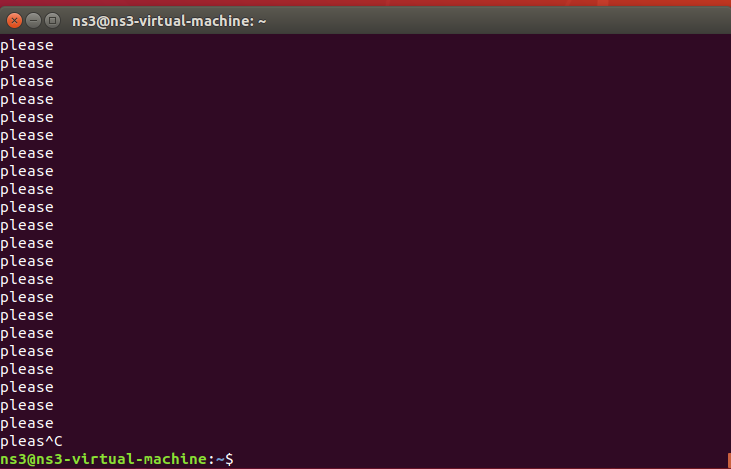
1. cal 9 1759 - Displays the calendar for September 1759.



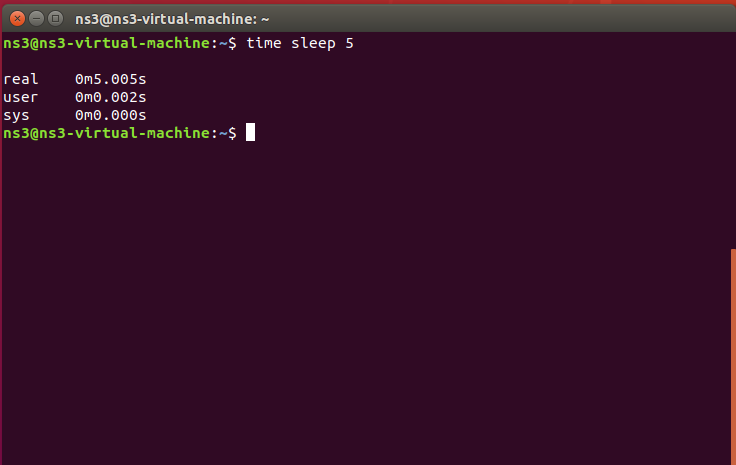
1. echo 5+4 | bc -l - Calculates the expression 5+4 using the bc calculator.



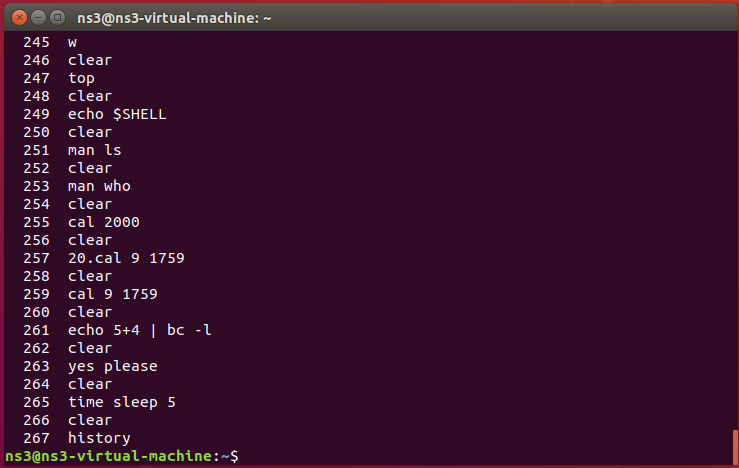
1. yes please - Continuously outputs "please" until interrupted (Ctrl-C to quit).



1. time sleep 5 - Measures the time taken to execute a sleep command for 5 seconds.

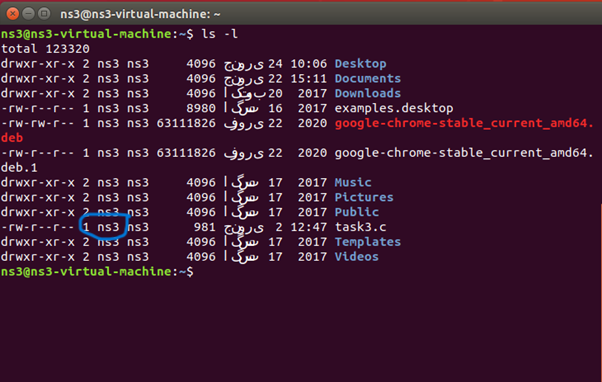


1. history - Shows the command history for the current session.

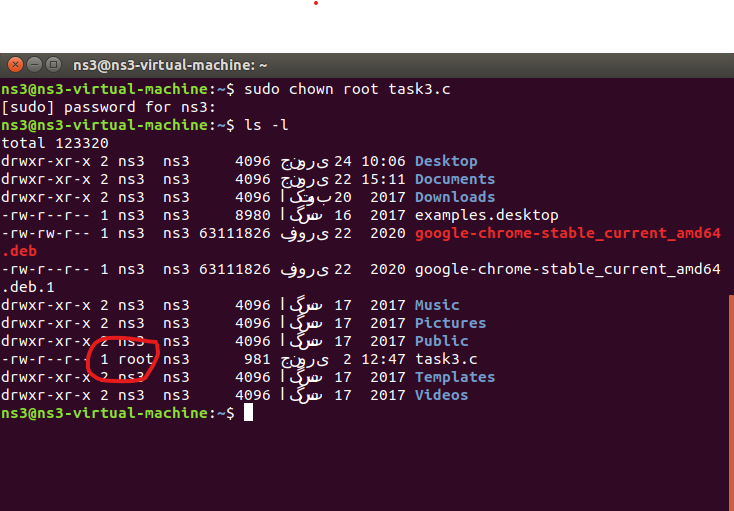


1. chown - Changes the ownership of files or directories.

BEFORE:

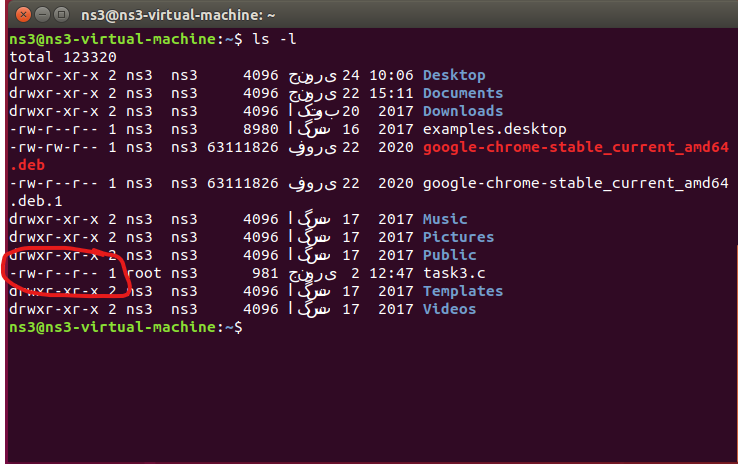


AFTER:

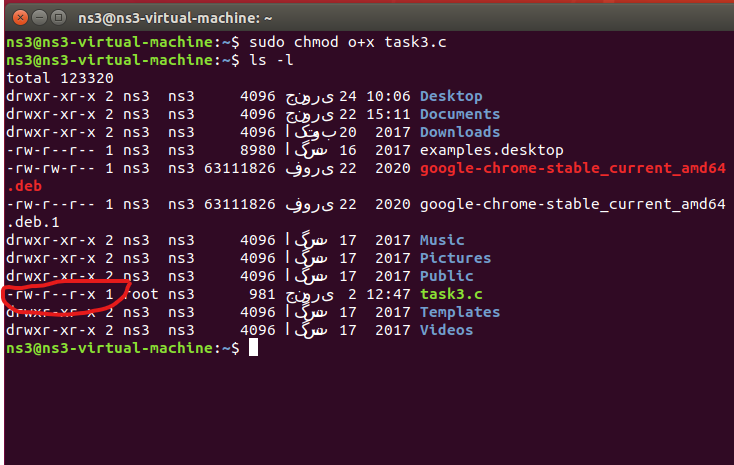


1. chmod - Changes the permissions of files or directories.

BEFORE:

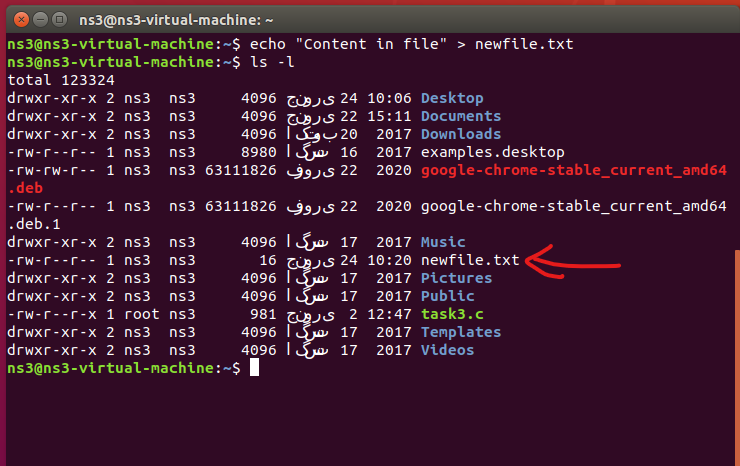


AFTER:

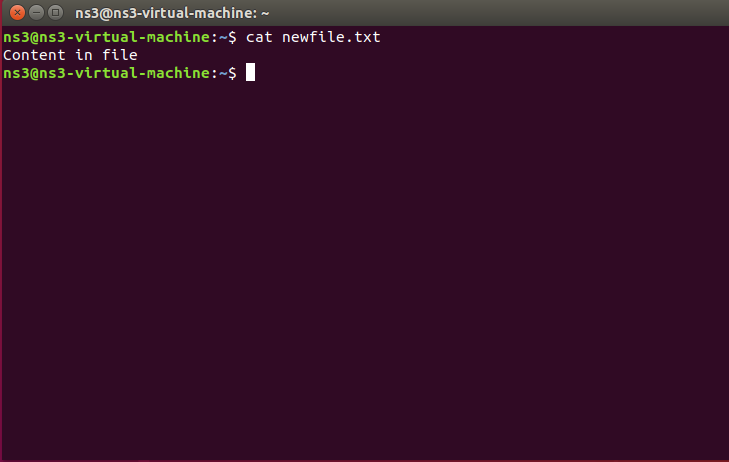


1. > - Redirects output to a file, overwriting it if it exists.

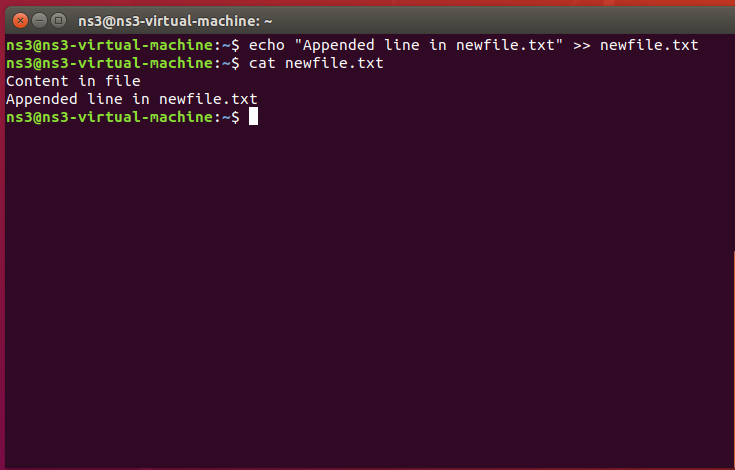
COMMAND:



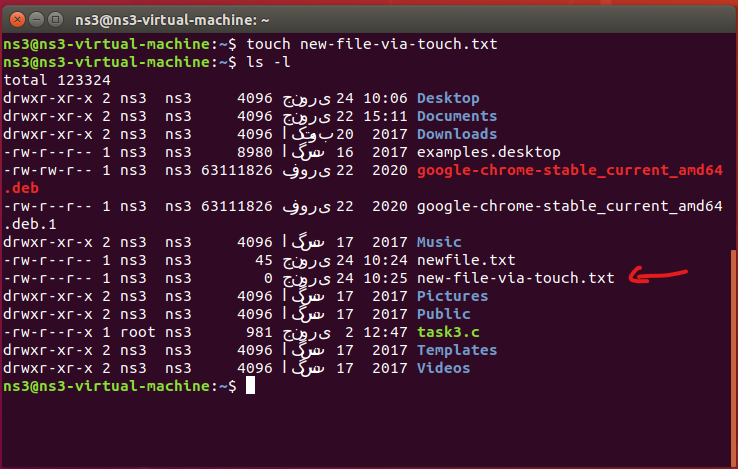
FILE-CONTENT:



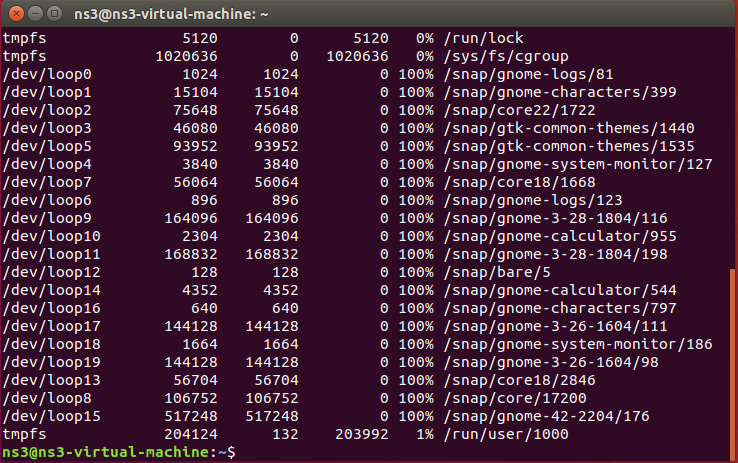
1. >> - Appends output to a file, creating it if it does not exist.



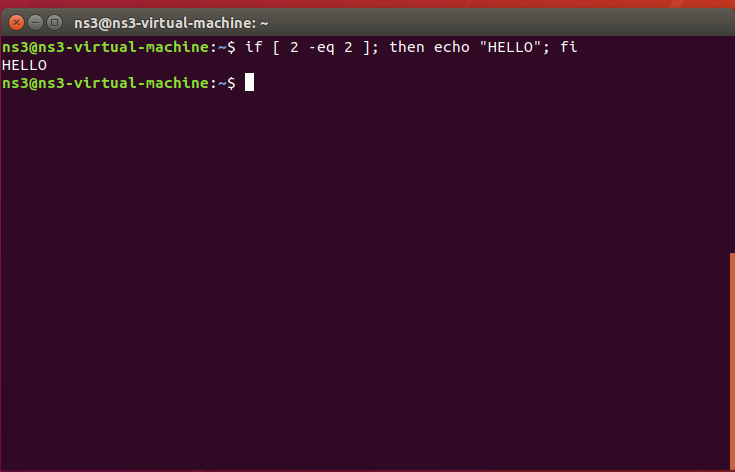
1. touch - Creates an empty file or updates the timestamp of an existing file.



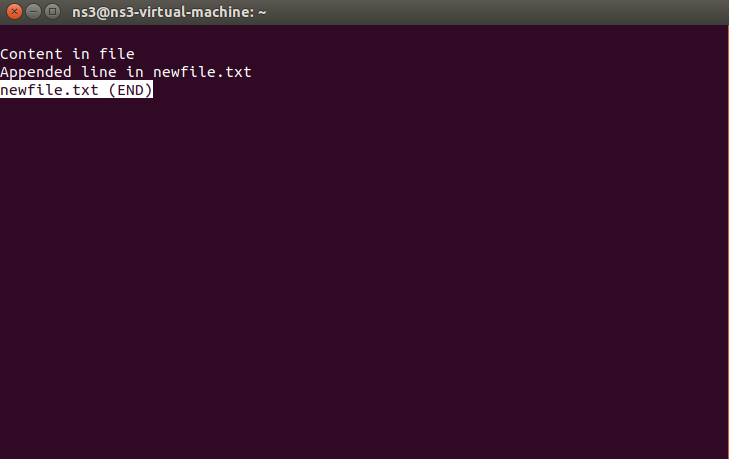
1. df - Displays disk space usage for file systems.



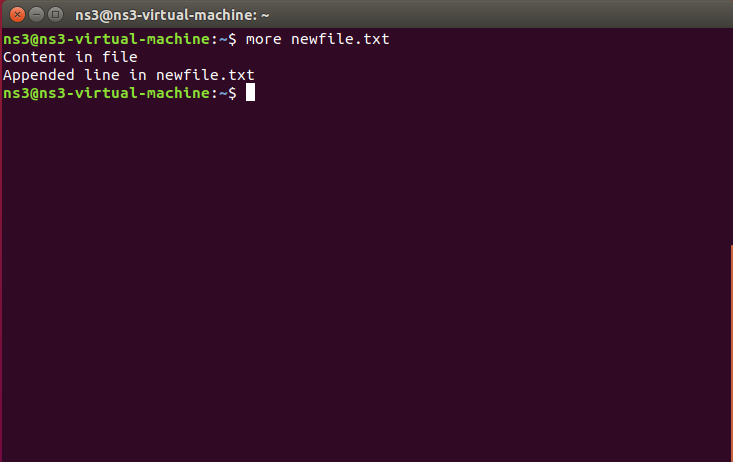
1. what if - (context-dependent; generally refers to a hypothetical scenario).



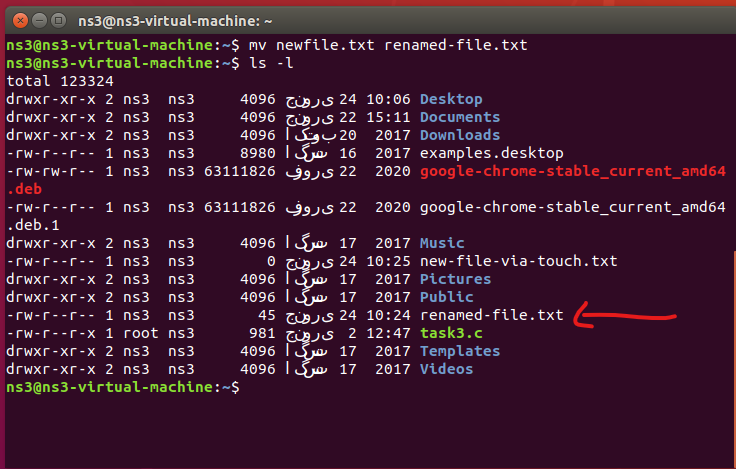
1. less - Views the content of a file one screen at a time.



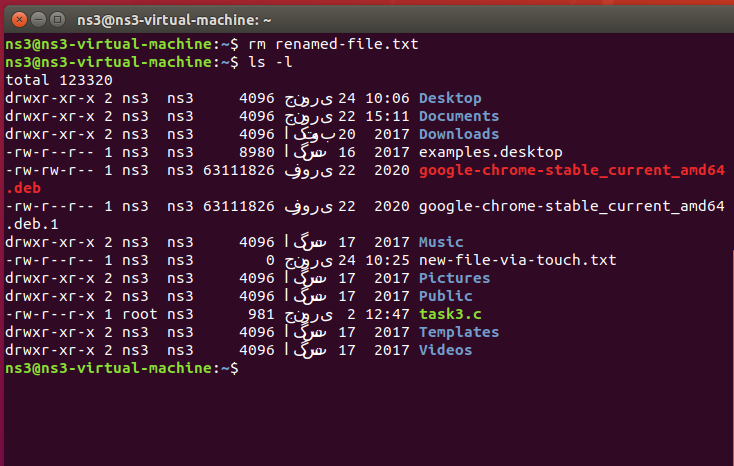
1. more - Similar to less, but with more limited navigation options.



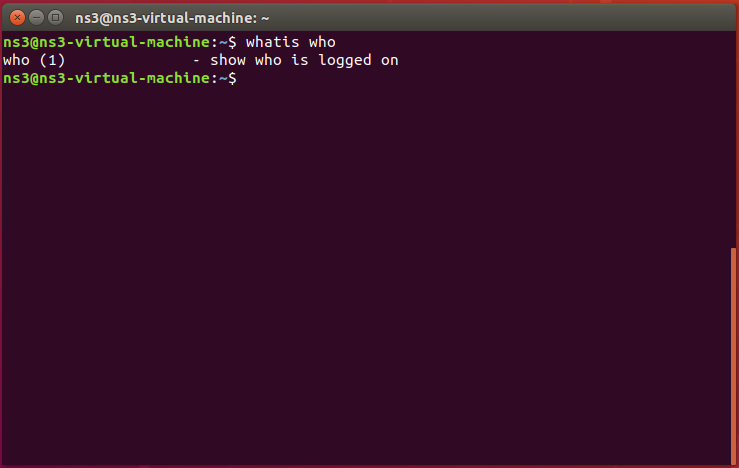
1. mv - Moves or renames files or directories.



1. rm - Removes (deletes) files or directories.

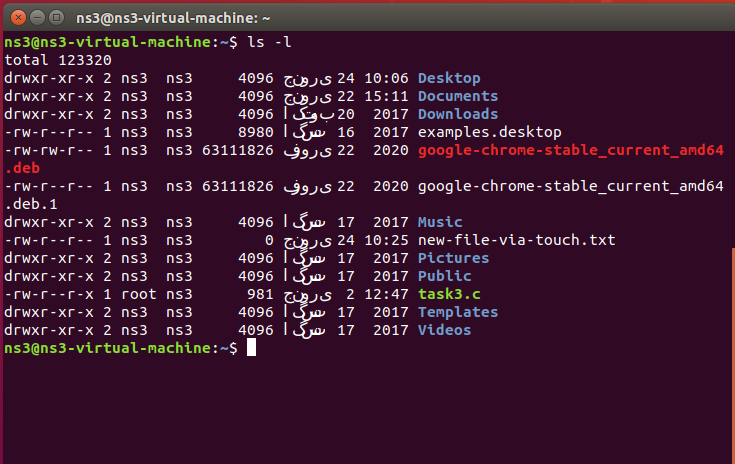


1. whatis - Provides a brief description of a command.

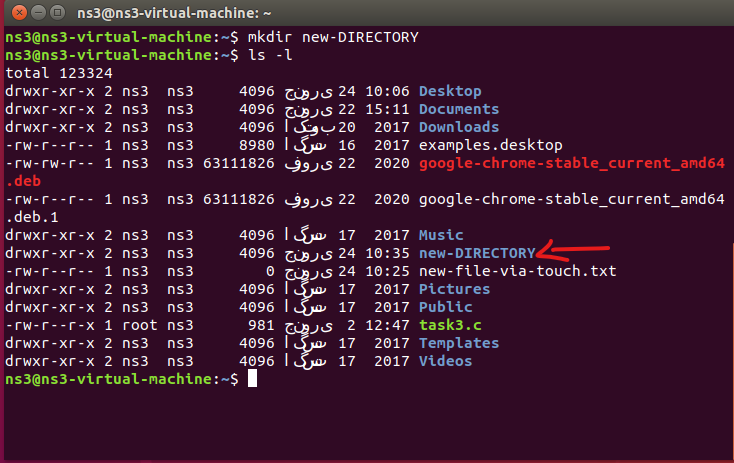


1. mkdir - Creates a new directory.

BEFORE:

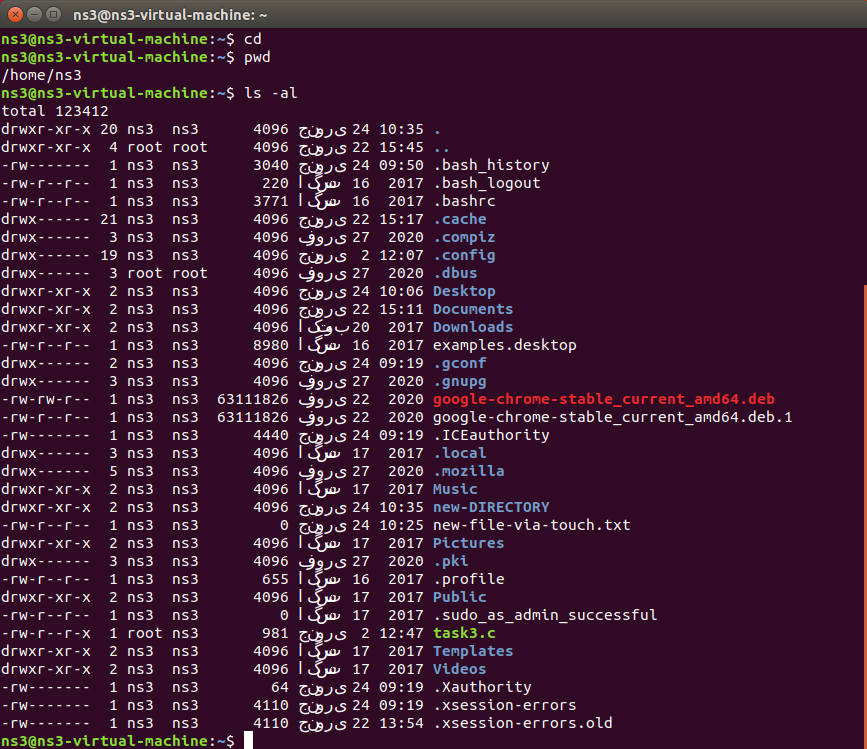


AFTER:

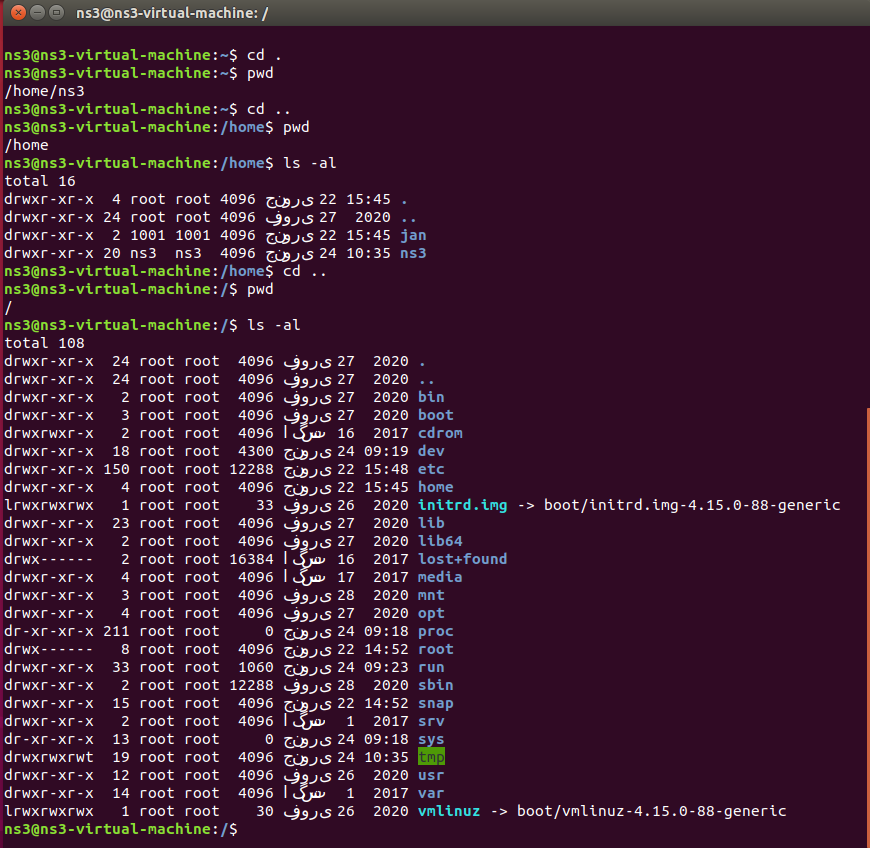


# Question 02

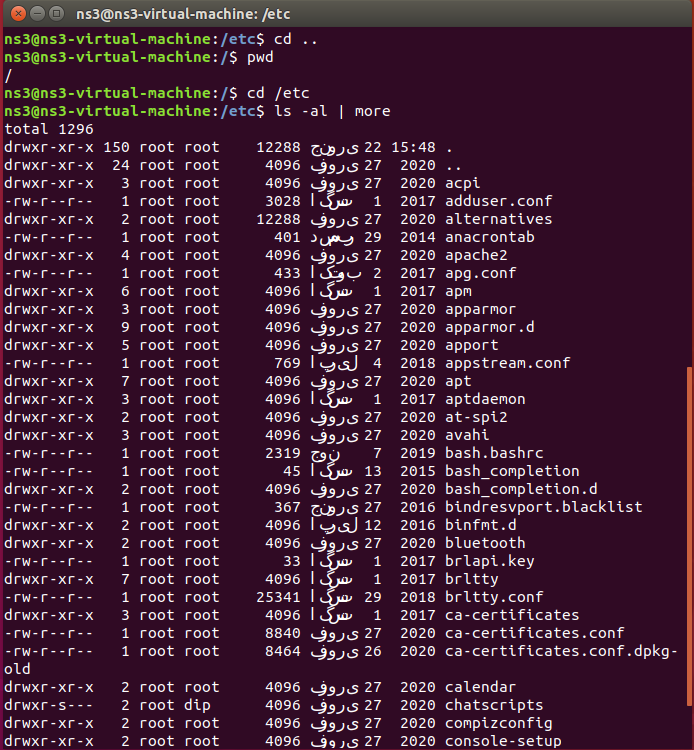
## cd, pwd, ls -al



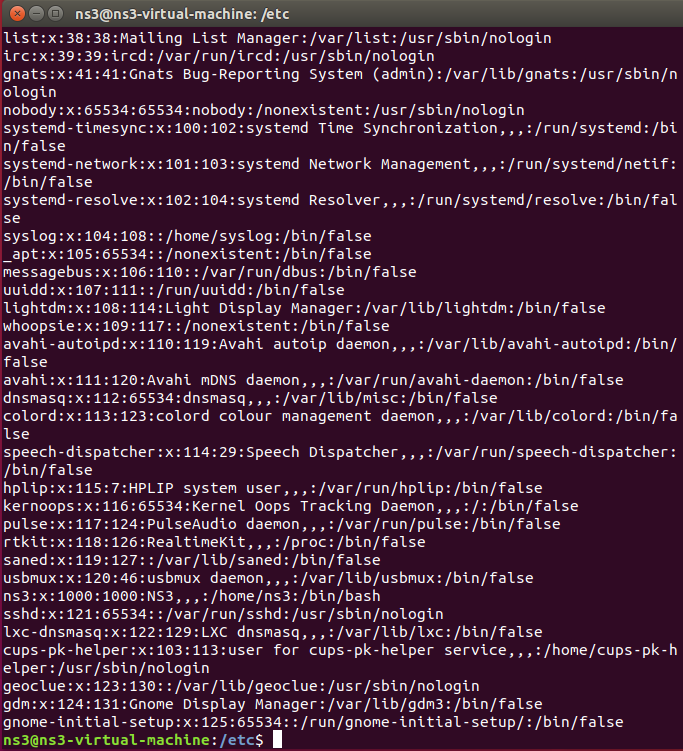
## cd ., pwd, cd .., pwd, ls -al, cd .., pwd, ls -al



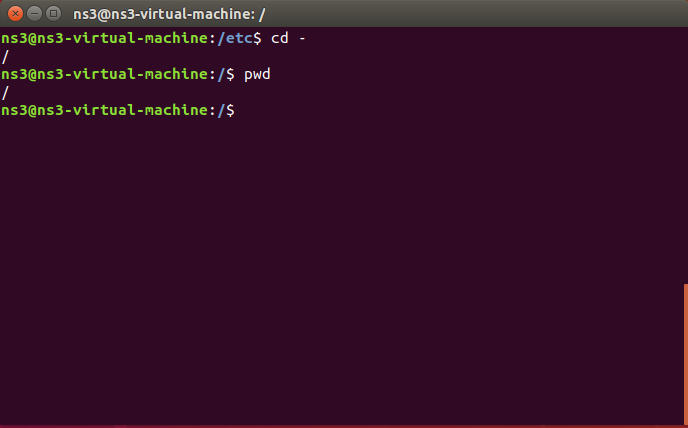
## cd .., pwd, cd /etc, ls -al | more



## cat passwd



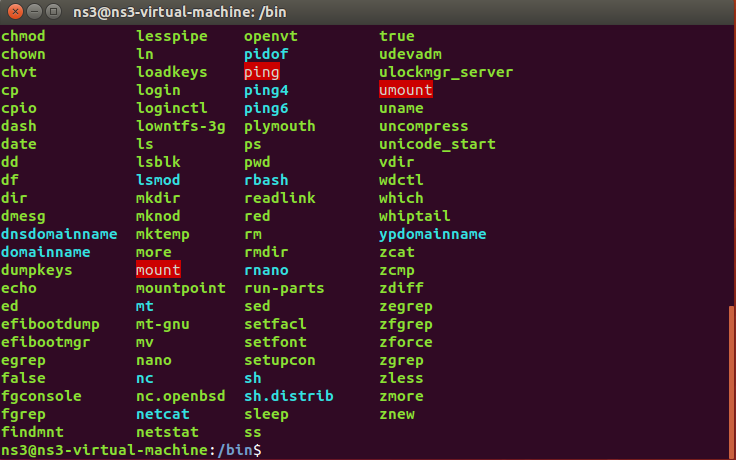
## cd –, pwd



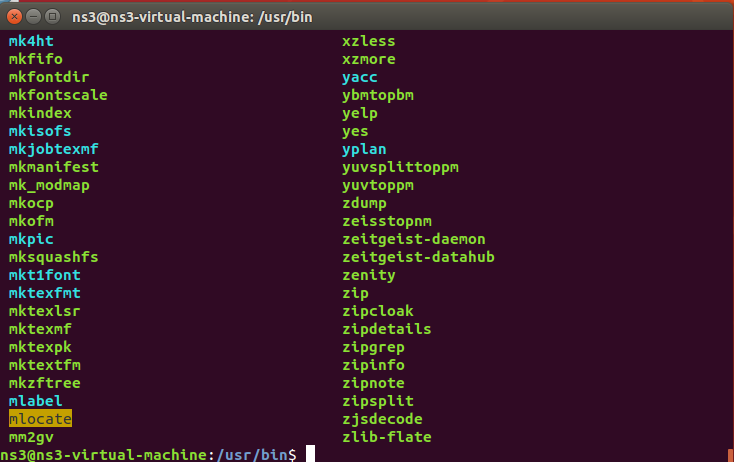
# Question 03

## Part 01

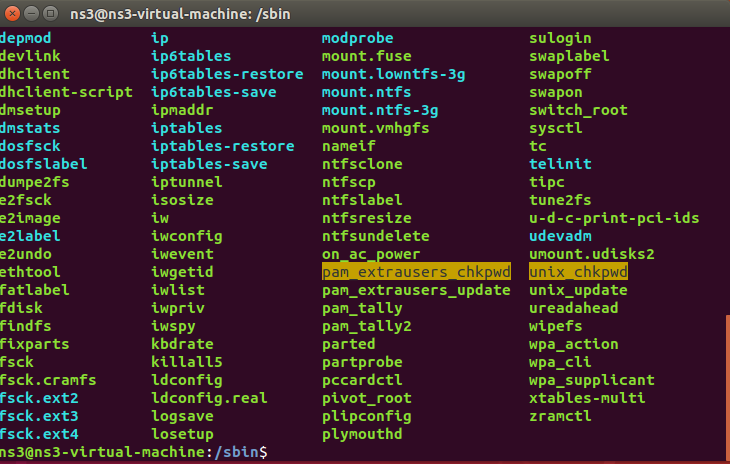
### /bin



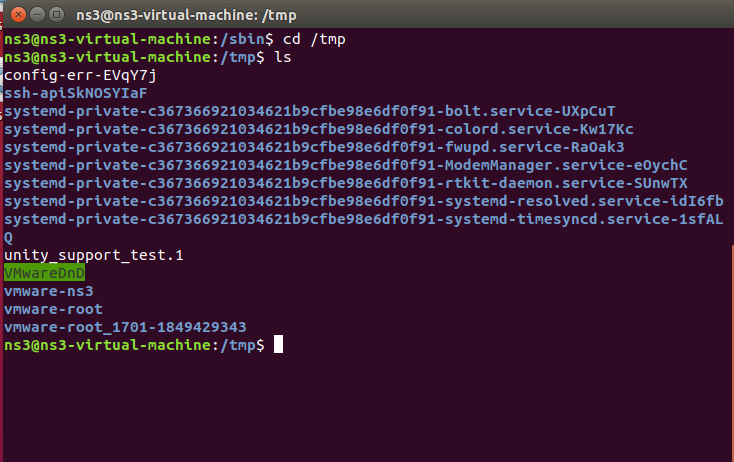
### /usr/bin



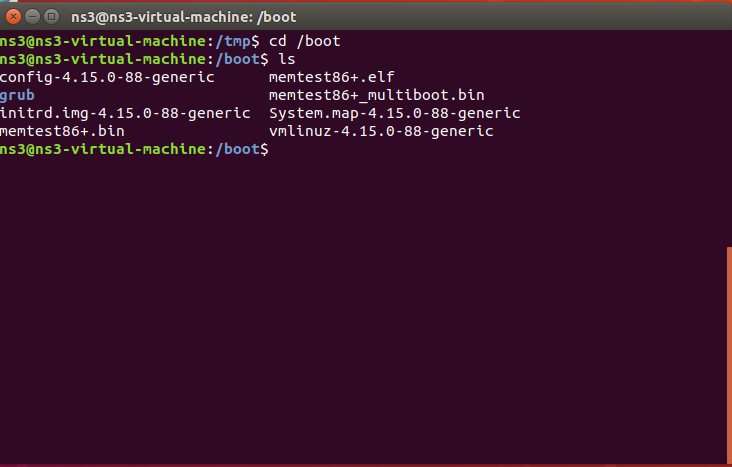
### /sbin



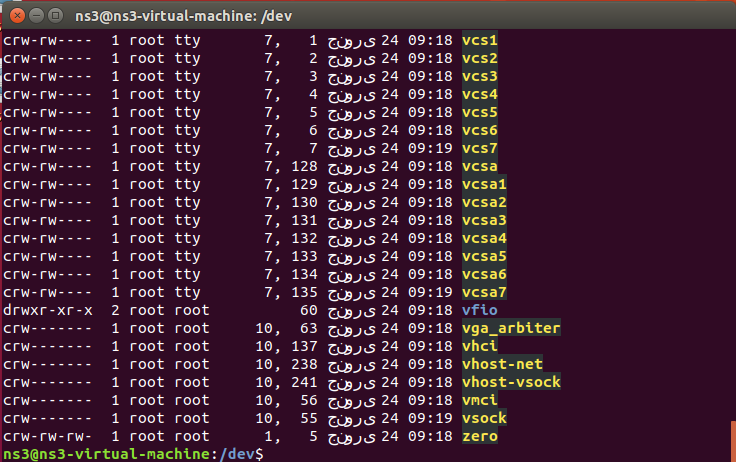
### /tmp



### /boot

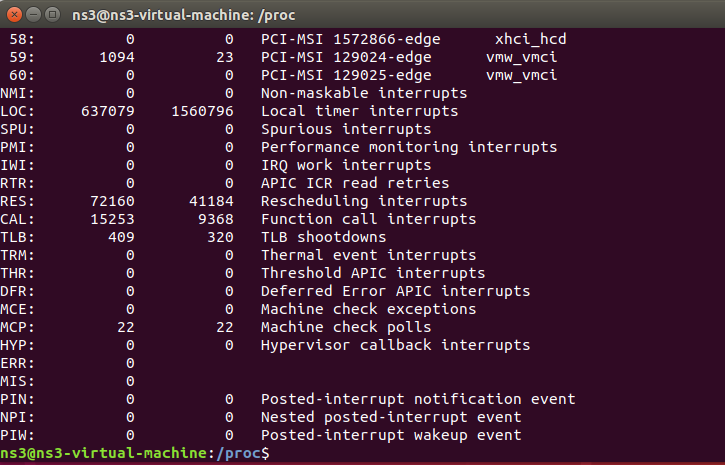


## Part 02

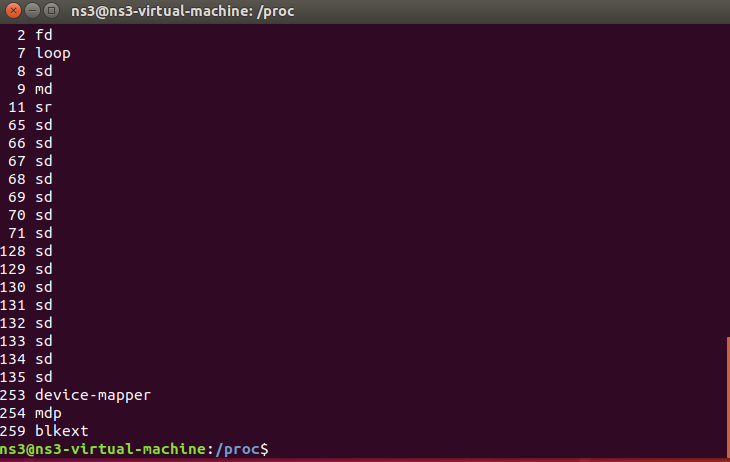


## Part 03

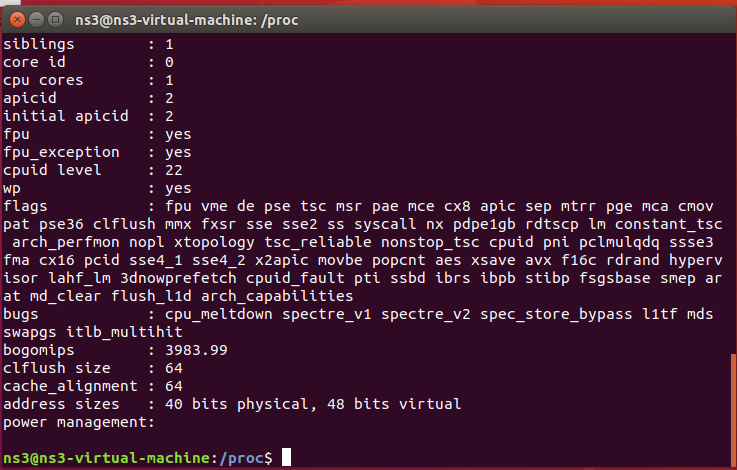
### Interrupts



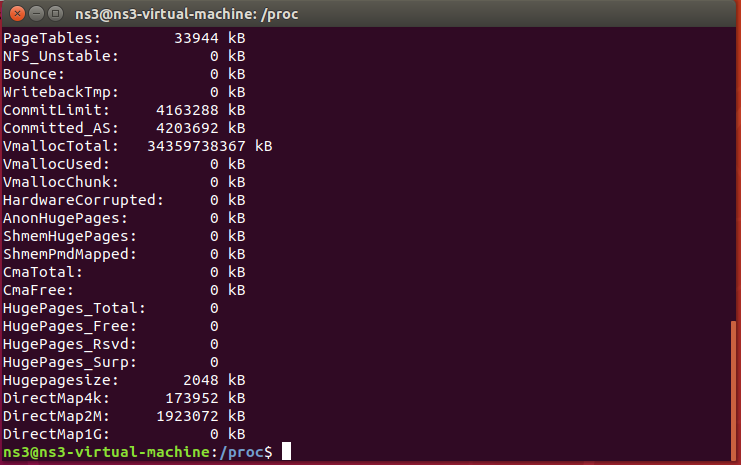
### Devices



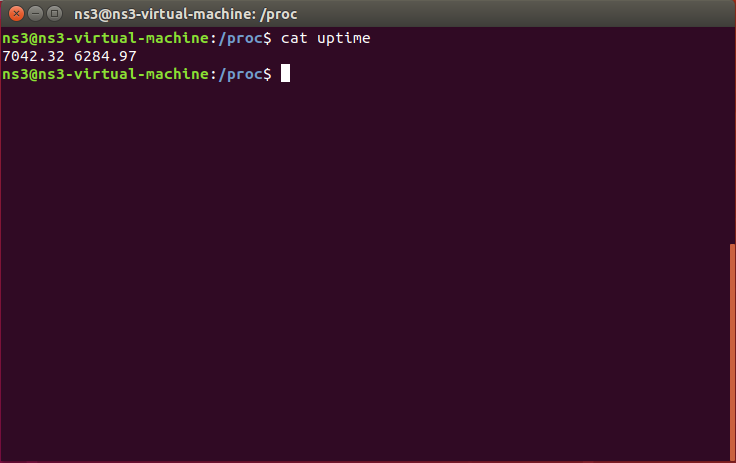
### Cpuinfo



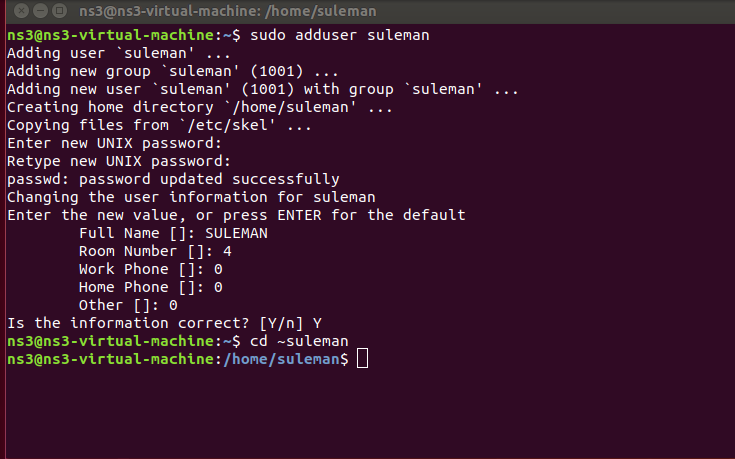
### Meminfo



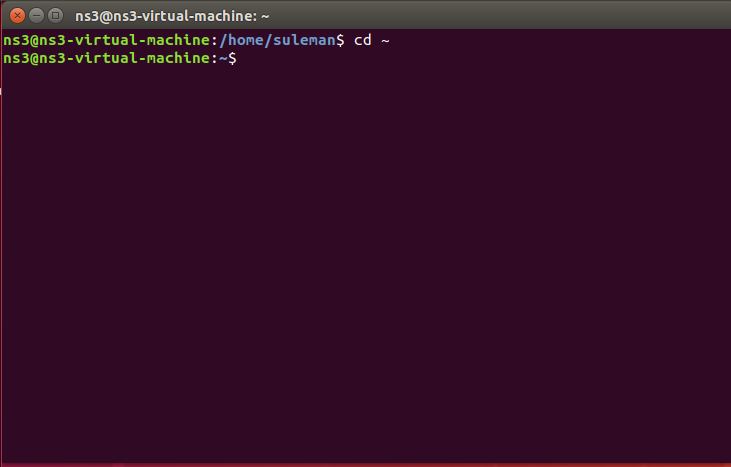
### Uptime



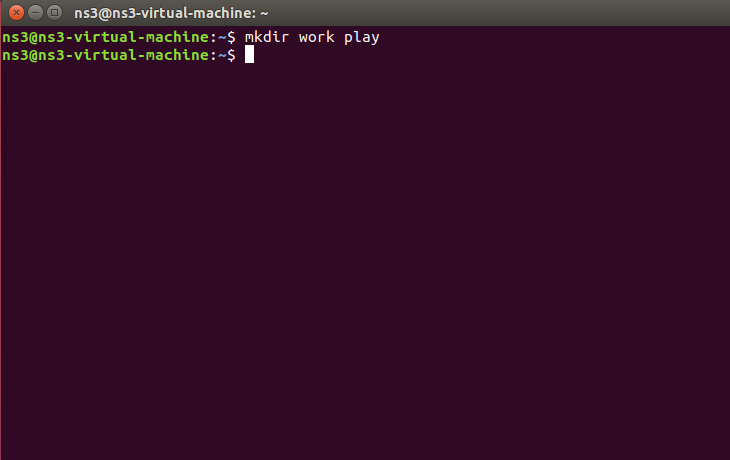
## Part 04



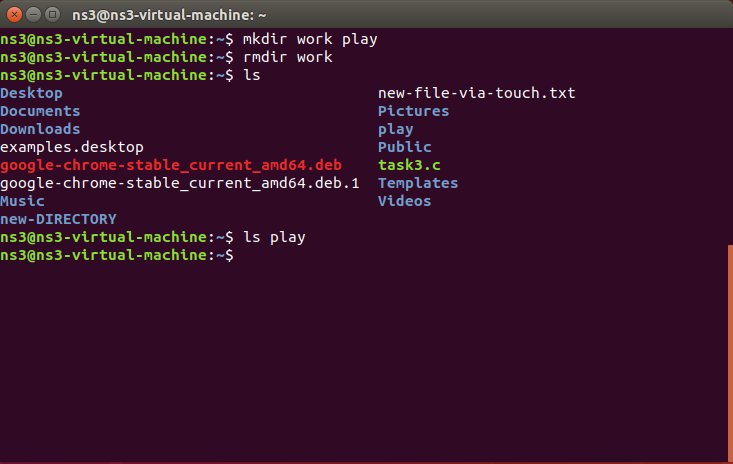
## Part 05



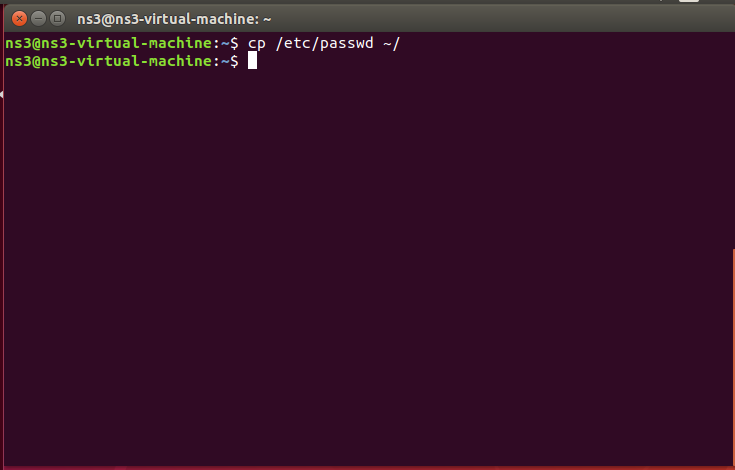
## Part 06



## Part 07



## Part 08



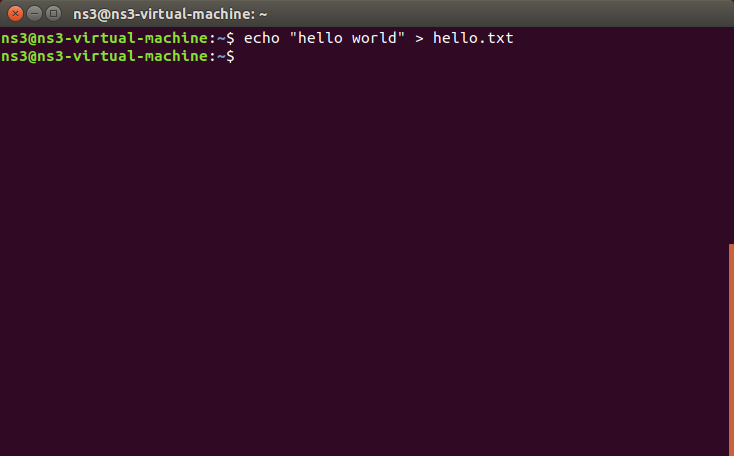
## Part 09



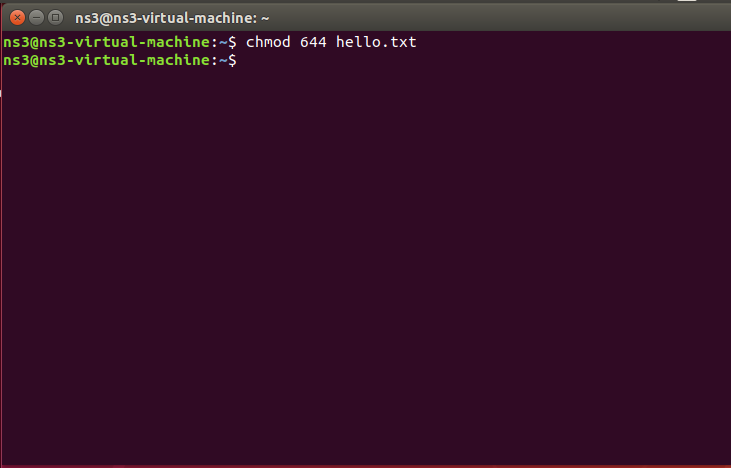
## Part 10

* **ls -l**: Lists files in long format, showing permissions, number of links, owner, group, size, and last modified time.
* **ls -L**: Follows symbolic links and lists the details of the files or directories they point to.

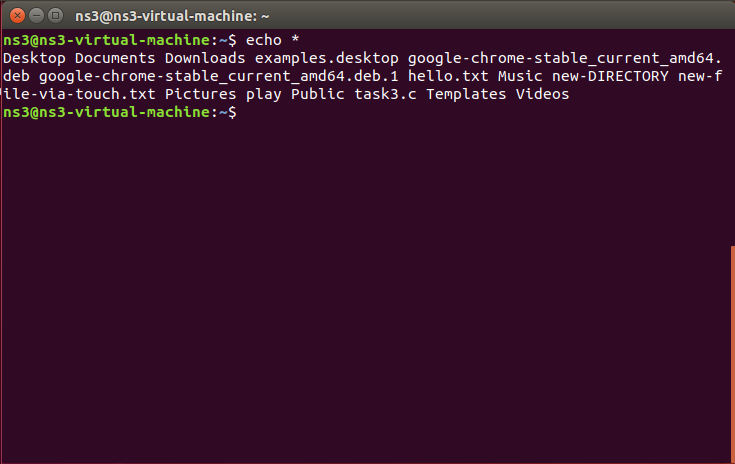
## Part 11



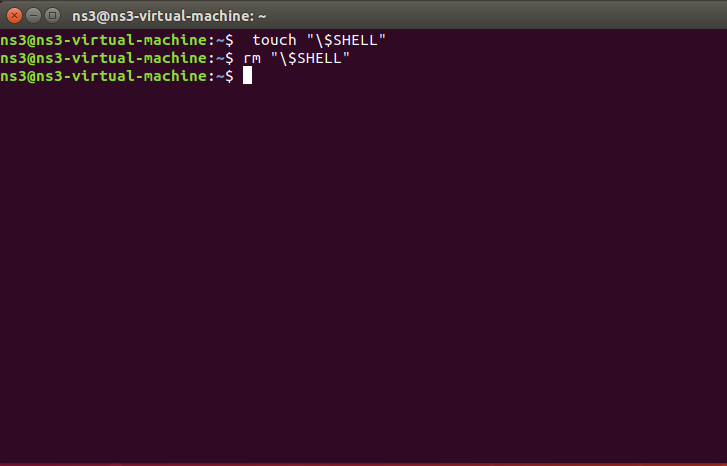
## Part 12



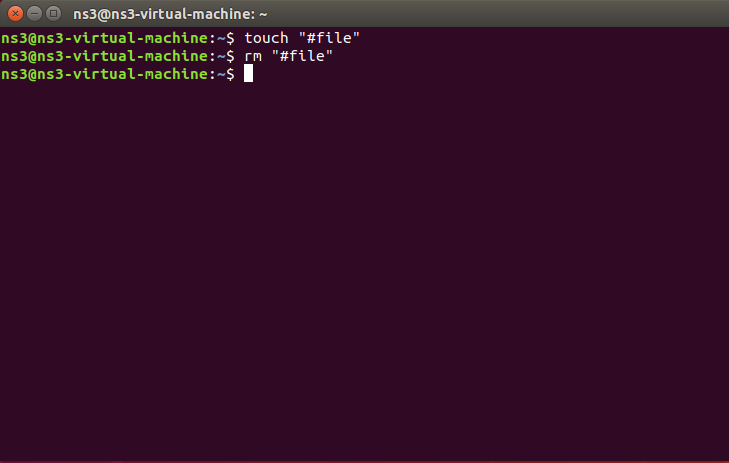
## Part 13



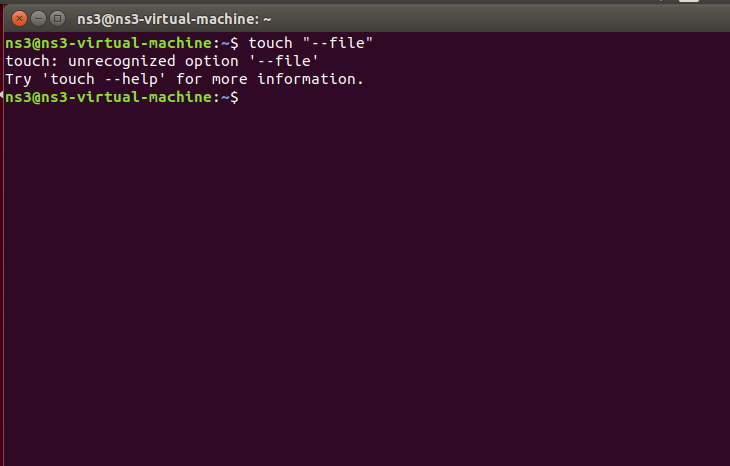
## Part 14



## Part 15



## Part 16



## Part 17

* **-d**: Lists directories themselves, not their contents.
* **-i**: Shows the inode number of each file.
* **-R**: Lists directories and their contents recursively.
* **-F**: Appends indicators to entries (e.g., / for directories, \* for executables).