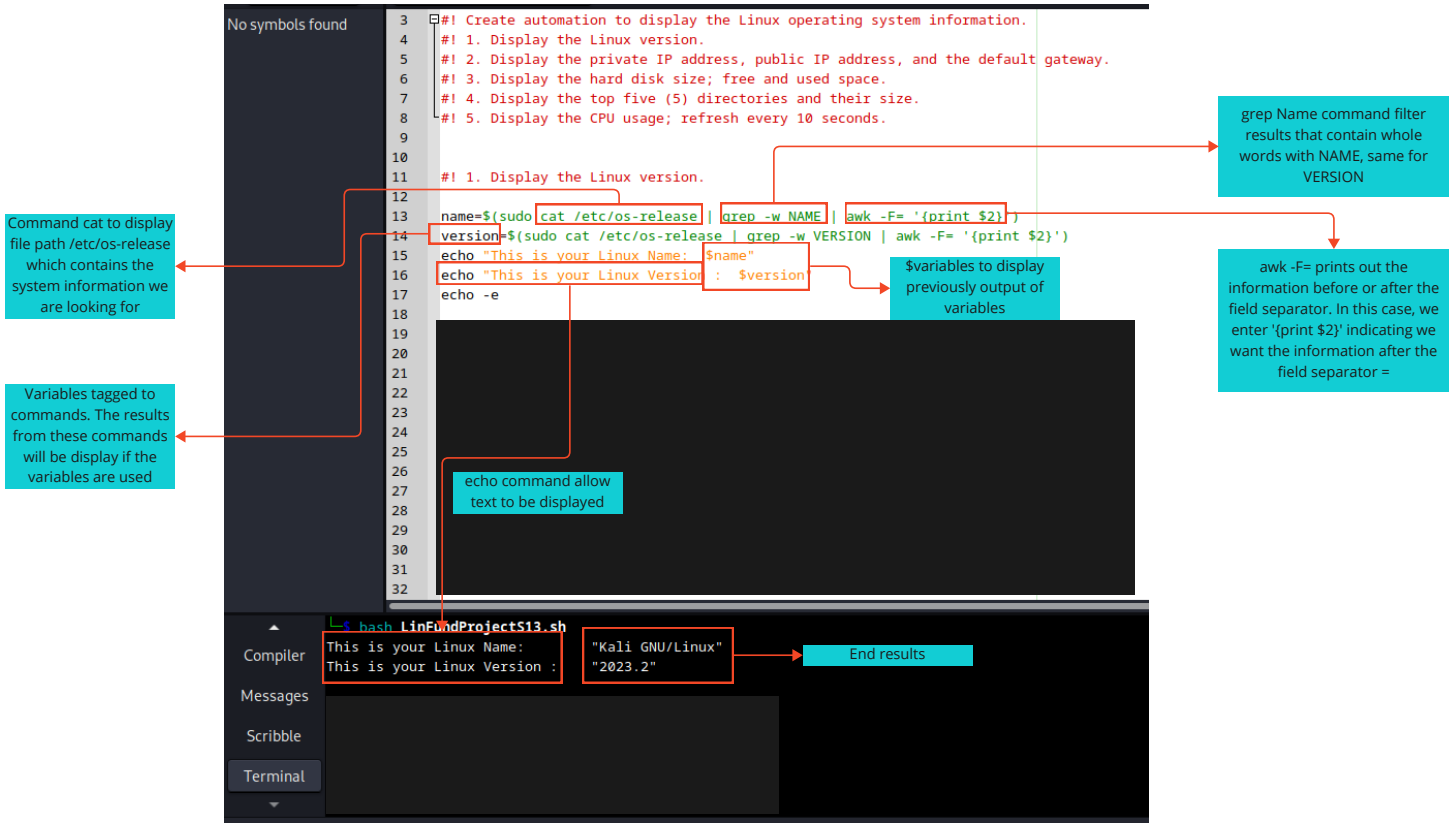
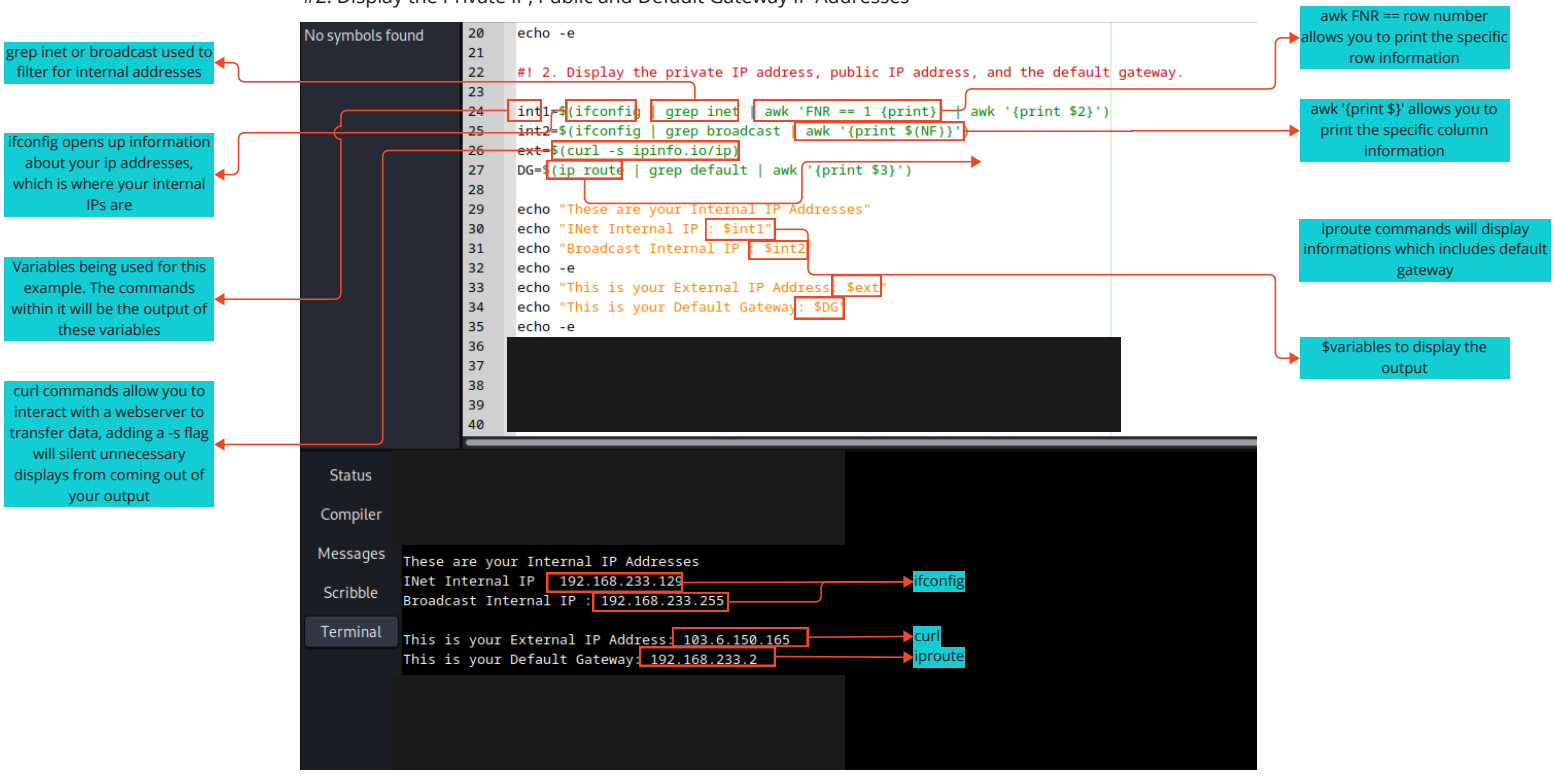
#1. Display the Linux Version



Detailed explanation for each command used

name=$(sudo cat /etc/os-release | grep -w NAME | awk -F= '{print $2}') ------ the output for the name variable will be the information found in /etc/os-release, containing the word NAME, column after the field separator =
version=$(sudo cat /etc/os-release | grep -w VERSION | awk -F= '{print $2}') ------ the output for the version variable will be the information found in /etc/os-release, containing the word VERSION, column after the field separator =
echo "This is your Linux Name : $name" ------ Print in terminal "This is your Linux Name" with the variable $name
echo "This is your Linux Version : $version ------ Print in terminal "This is your Linux Version" with the variable $version

#2. Display the Private IP, Public and Default Gateway IP Addresses

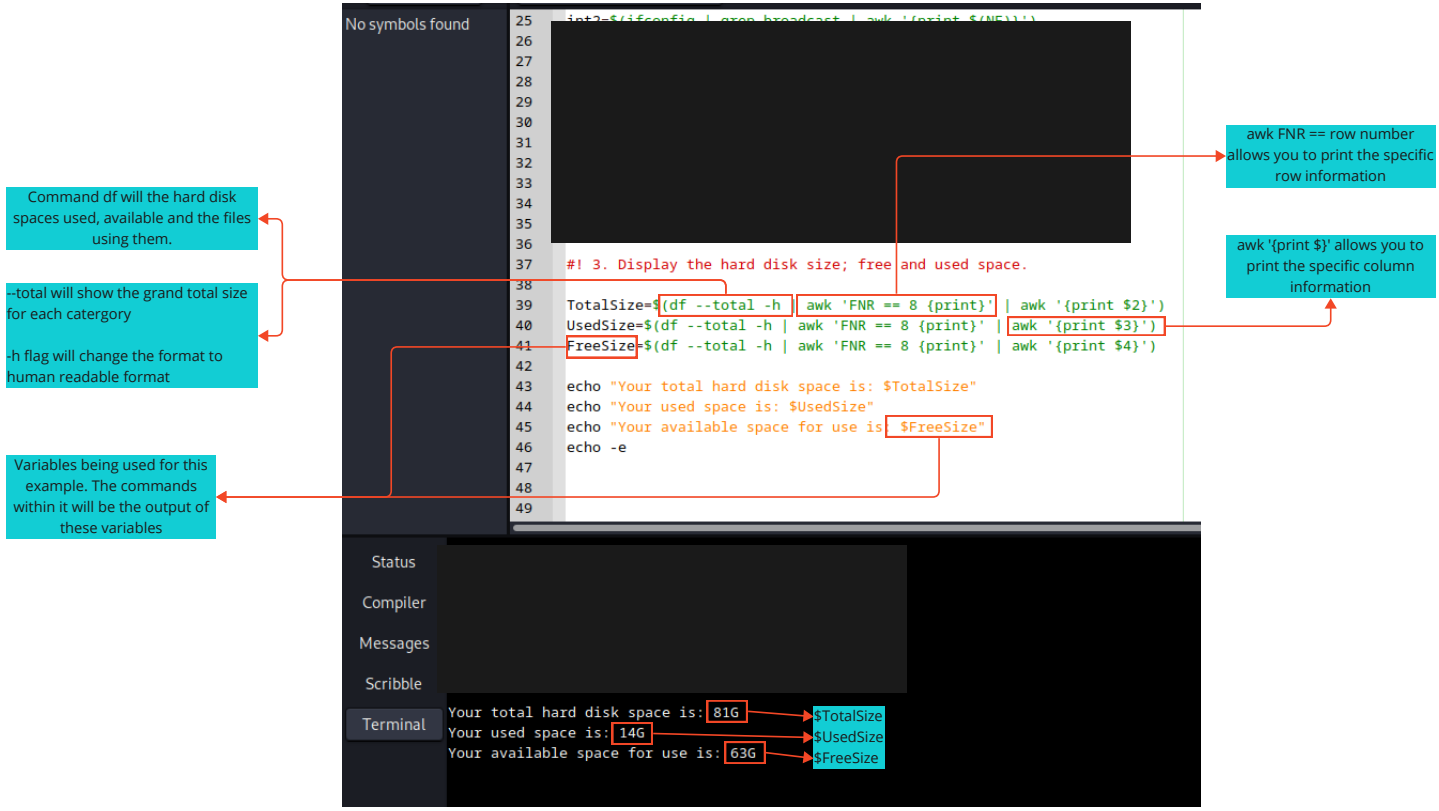


Detailed explanation for each command used

int1=$(ifconfig | grep inet | awk 'FNR == 1 {print}' | awk '{print $2}') ------ the output for the int1 variable will be the information found in ifconfig command, containing the word inet, row 1, column 2
int2=$(ifconfig | grep broadcast | awk '{print $(NF)}') ------ the output for the int2 variable will be the information found in ifconfig command, containing the word broadcast, row 1 from the back
ext=$(curl -s ipinfo.io/ip) ------ the output for ext variable will be the data received from domain ipinfo.io/ip
DG=$(ip route | grep default | awk '{print $3}') ------ the output for the DG variable will be the information found in ip route command, containing the word default, row 3

echo "These are your Internal IP Addresses" ------ Print in terminal "These are your Internal IP Addresses"
echo "INet Internal IP : $int1" ------ Print in terminal "INet Internal IP" with the variable $int1
echo "Broadcast Internal IP : $int2" ------ Print in terminal "Broadcast Internal IP" with the variable $int2
echo "This is your External IP Address: $ext" ------ Print in terminal "This is your External IP Address" with the variable $ext
echo "This is your Default Gateway: $DG" ------ Print in terminal "This is your Default Gateway" with the variable $DG

#3. Display the hard disk size, free and used space

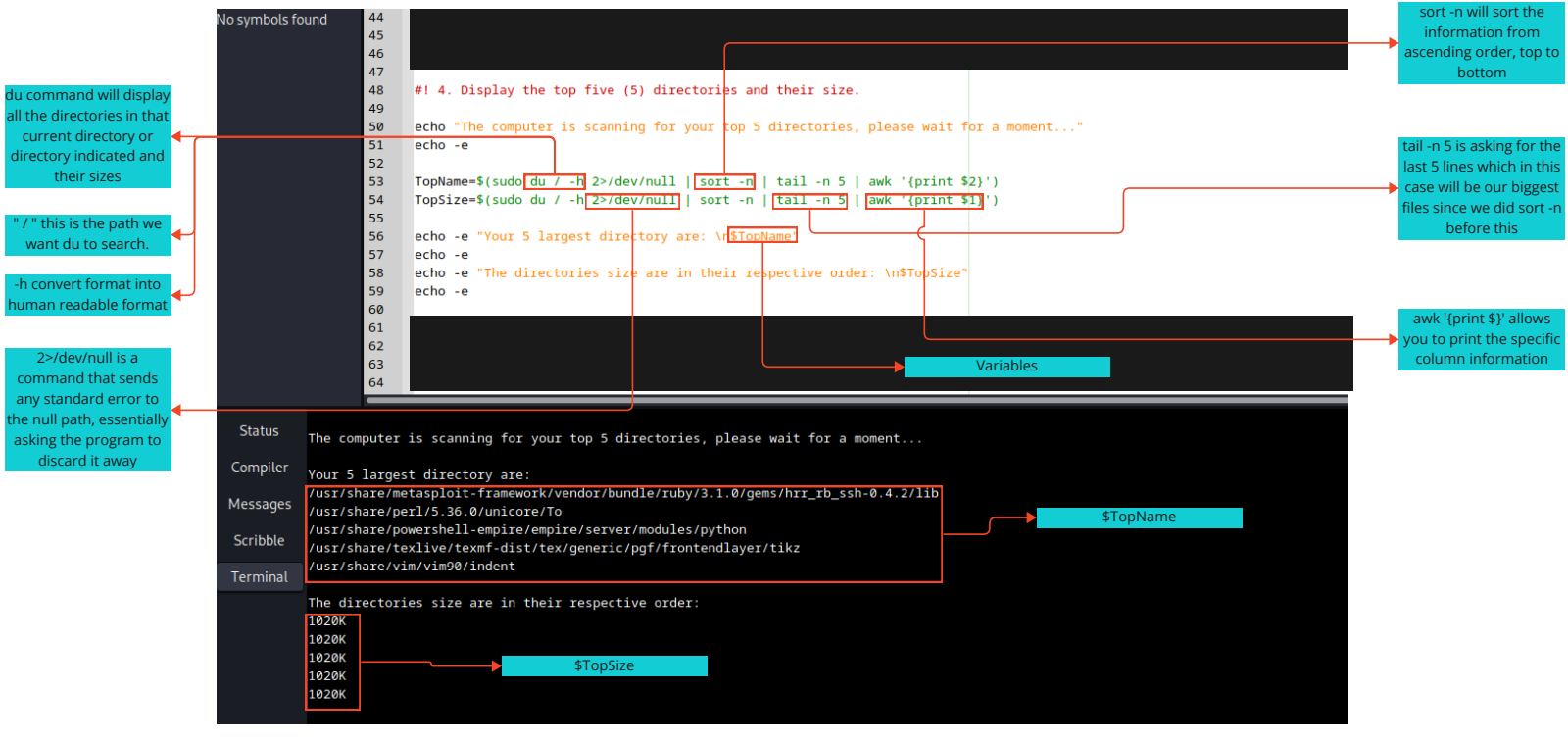


Detailed explanation for each command used

TotalSize=$(df --total -h | awk 'FNR == 8 {print}' | awk '{print $2}') ------ the output for the variable TotalSize will be the information from the command df --total -h, row 8, column 2
UsedSize=$(df --total -h | awk 'FNR == 8 {print}' | awk '{print $3}') ------ the output for the variable UsedSize will be the information from the command df --total -h, row 8, column 3
FreeSize=$(df --total -h | awk 'FNR == 8 {print}' | awk '{print $4}') ------ the output for the variable FreeSize will be the information from the command df --total -h, row 8, column 4

echo "Your total hard disk space is: $TotalSize" ------ Print in terminal "Your total hard disk space is" with the variable $TotalSize
echo "Your used space is: $UsedSize" ------ Print in terminal "Your used space is" with the variable $UsedSize
echo "Your available space for use is: $FreeSize" ------ Print in terminal "Your available space for use is" with the variable $FreeSize

#4. Display the top five (5) directories and their size



Detailed explanation for each command used

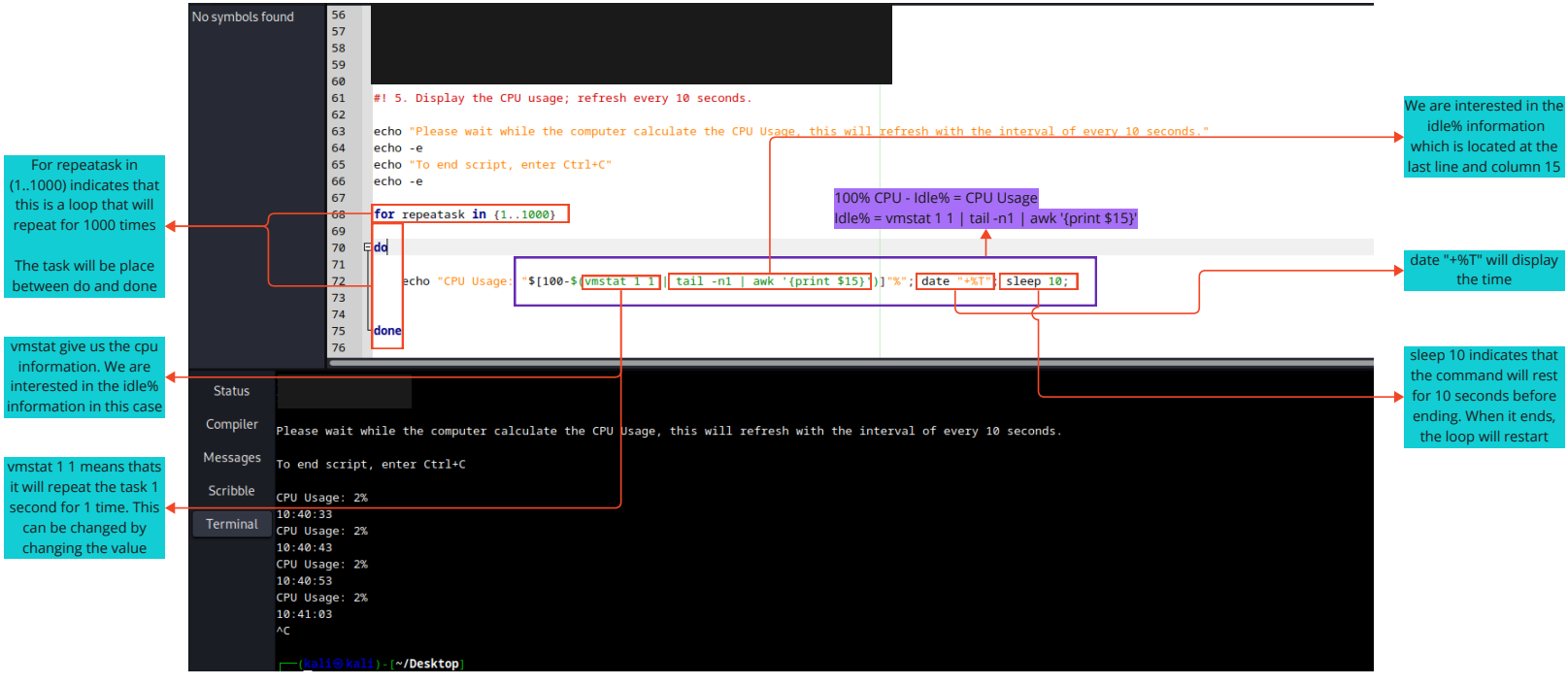
echo "The computer is scanning for your top 5 directories, please wait for a moment..." ------ Print in terminal "The computer is scanning for your top 5 directories, please wait for a moment..."

TopName=$(sudo du / -h 2>/dev/null | sort -n | tail -n 5 | awk '{print $2}') ------ the output for the variable Topname will be the information in the du command, the path /, send any standard error to the null folder, sort the results in ascending order from top to bottom, only give the last 5 results, column 2

TopSize=$(sudo du / -h 2>/dev/null | sort -n | tail -n 5 | awk '{print $1}') ------ the output for the variable TopSize will be the information in the du command, the path /, send any standard error to the null folder, sort the results in ascending order from top to bottom, only give the last 5 results, column 1

echo -e "Your 5 largest directory are: \n$TopName" ------ Print in terminal "Your 5 largest directory are:" with the variable $TopName
echo -e "The directories size are in their respective order: \n$TopSize" ------ Print in terminal "The directories size are in their respective order:" with the variable $TopSize

#5. Display the CPU Usage; refresh every 10 seconds



Detailed explanation for each command used

echo "Please wait while the computer calculate the CPU Usage, this will refresh with the interval of every 10 seconds." ------ Print in terminal "Please wait while the computer calculate the CPU Usage, this will refresh with the interval of every 10 seconds."
echo "To end script, enter Ctrl+C" ------ Print in terminal "To end script, enter Ctrl+C"

for repeatask in {1..1000} ------ the task named 'repeatask' shall execute the command within the loop for 1000 times
echo "CPU Usage: "$[100-$(vmstat 1 1 | tail -n1 | awk '{print $15}')]"%"; date "+%T"; sleep 10; ------ echo CPU Usage % by using the output of 100 minus information given by vmstat, last row, row 15, and print the time, and delay finishing for 10seconds