



## AFRICA REGION TO THE INTERNATIONAL CYBER SECURITY COMPETITION

20 August 2022

### AFRICC Individual Assessment :1

#### Linux Fundamentals Practice Lab: 1

##### Instructions

- You need to have Kali Linux OS Installed
- You need to have Parrot OS installed
- On both Kali Linux and Parrot OS create and use a user account name **"AFRICC20"**
- **Due date 23 August 2022, 23:59 (GMT +02:00)**
- **No late submissions will be accepted**
- Each member to submit their lab in a write-up format **(Include all the screenshots for each step as evidence of doing)**
- Submit your work to the following email addresses.
  - [piusshambabi@gmail.com](mailto:piusshambabi@gmail.com)
  - [deepshikha.meetoo1@uom.ac.mu](mailto:deepshikha.meetoo1@uom.ac.mu)*And CC the following*
  - [mchitauro@nust.na](mailto:mchitauro@nust.na)
  - [tinashechiff@gmail.com](mailto:tinashechiff@gmail.com)
  - [chancardmaboulou@gmail.com](mailto:chancardmaboulou@gmail.com)
  - [mitulnarotam@gmail.com](mailto:mitulnarotam@gmail.com)

##### **Section 1: the following tasks should be performed on the Kali Linux**

1. Execute the following commands and explain their meanings
  - 1.1 ls
  - 1.2 ls -a
  - 1.3 whoami
  - 1.4 pwd
  - 1.5 ls -t
  - 1.6 ps -f
  - 1.7 ls -all
  - 1.8 su -l
  - 1.9 ls -l
  - 1.10 w -s
  - 1.11 loginname
  - 1.12 exit
  - 1.13 hostname
  - 1.14 sudo -v

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1.15  sudo -k
1.16  pwd
1.17  ls
1.18  cd Documents
1.19  cd /etc
1.20  ls
1.21  cd ..
1.22  ls
1.23  cd ~
1.24  ls
1.25  type pwd
1.26  cd ~
1.27  sudo mkdir /Desktop/AFRICC_22
1.28  cd Desktop
1.29  ls
1.30  sudo mkdir /Desktop/AFRICC_22/DeleteMe
1.31  ls
1.32  sudo rmdir /Desktop/AFRICC_22/DeleteMe
1.33  ls
1.34  cd ~
1.35  cd AFRICC_22
1.36  touch LinuxToday.txt
1.37  touch Assignment01.txt
1.38  ls
1.39  vi LinuxToday.txt
1.40  Press "i" to insert the content
1.41  Type the following "Hello Team! I'm ["Your Full Name"- e.g Pius Shambabi] from
    [Your University and your country – e.g., University of Mauritius (MoU) – Mauritius],
    Today we learned about Linux fundamentals.
1.42  Press esc on the keyboard, enter:wq then press enter on the keyboard.
1.43  Cat LinuxToday.txt
1.44  ls -all AFRICC_22
1.45  ls AFRICC_22
1.46  cd /desktop
1.47  basement /home/kali/Desktop/afriCC_22/LinuxToday.txt
1.48  dirname /home/kali/Desktop/AFRICC_22/LinuxToday.txt
1.49  cd ~
1.50  sudo mkdir /Desktop/AFRICC_2023
1.51  ls
1.52  cp /Desktop/AFRICC_22/Assignment01.txt /Desktop/ AFRICC_2023
1.53  mv /Desktop/ AFRICC_2023/Assignment01.txt /Desktop/AFRICC_22
1.54  ls /Desktop/AFRICC_22
1.55  mv /Desktop/AFRICC_22/Assignment01.txt FileRenamed.txt
1.56  rm /Desktop/AFRICC_22/FileRenamed.txt
1.57  cd ~
1.58  cd Documents
1.59  mkdir CyberFiles
1.60  sudo touch CyberFiles/Cybersecurity2022.txt
```

- 1.61 ls CyberFiles
- 1.62 file CyberFiles/Cybersecurity.txt
- 1.63 vi CyberFiles/Cybersecurity.txt
- 1.64 **copy and paste** the following *"Apple has disclosed serious security vulnerabilities for iPhones, iPads and Macs, which could potentially allow attackers to take complete control of devices. Apple added that it is "aware of a report that this issue may have been actively exploited". Security experts have advised users to urgently update affected devices - the iPhone 6S and later models, newer iPads, and Mac computers running macOS Monterey. It also impacts some iPod models. In a security update on its support page, Apple said one of the flaws means a malicious application "may be able to execute arbitrary code with kernel privileges" - which TechCrunch describes as meaning full access to the device. TechCrunch reported that the other - a WebKit bug - could be exploited if a vulnerable device accessed or processed "maliciously crafted web content [that] may lead to arbitrary code execution" Apple did not give any further information on how many users were affected by the vulnerability. The warning to users comes ahead of its traditional September launch of the latest iPhone - expected this year to be named the iPhone 14."*
- 1.65 Press **esc** on the keyboard, enter:**wq!** then press enter on the keyboard
- 1.66 cat CyberFiles/Cybersecurity2022.txt
- 1.67 cat CyberFiles/Cybersecurity2022.txt | less
- 1.68 cat CyberFiles/Cybersecurity2022.txt | more
- 1.69 head CyberFiles/Cybersecurity2022.txt
- 1.70 tail CyberFiles/Cybersecurity2022.txt
- 1.71 stat CyberFiles/Cybersecurity2022.txt
- 1.72 nl CyberFiles/Cybersecurity2022.txt
- 1.73 cp Cybersecurity2022.txt CyberSecurity2022.txt
- 1.74 ls
- 1.75 diff Cybersecurity2022.txt CyberSecurity2022.txt
- 1.76 md5sum Cybersecurity2022.txt
- 1.77 md5sum CyberSecurity2022.txt
- 1.78 cd ~
- 1.79 ls
- 1.80 grep security Documents/CyberFiles/Cybersecurity2022.txt
- 1.81 grep security Documents/CyberFiles/ CyberSecurity2022.txt
- 1.82 egrep iPhones Documents/CyberFiles/Cybersecurity2022.txt
- 1.83 cd ~
- 1.84 gzip Documents/CyberFiles/Cybersecurity2022.txt
- 1.85 ls Documents/CyberFiles
- 1.86 gunzip Documents/CyberFiles/Cybersecurity2022.txt.gz
- 1.87 ls Documents/CyberFiles
- 1.88 bzip2 Documents/CyberFiles/ CyberSecurity2022.txt
- 1.89 ls Documents/CyberFiles
- 1.90 bunzip2 Documents/CyberFiles/ CyberSecurity2022.txt.bz2
- 1.91 ps -u AFRICC20
- 1.92 kill [any process id]
- 1.93 w -s
- 1.94 df -h
- 1.95 uptime
- 1.96 top

1.97 sudo useradd Namibia  
1.98 sudo useradd Africa  
1.99 sudo useradd USA  
1.100 cat /etc/passwd  
1.101 userdel USA  
1.102 cat /etc/passwd  
1.103 passwd Namibia  
1.104 chfn Namibia  
1.105 cat /etc/passwd  
1.106 finger Namibia  
1.107 groups root  
1.108 groups AFRICC20  
1.109 group Namibia  
1.110 sudo groupadd Cybernerds  
1.111 cat /etc/group  
1.112 sudo groupdel Cybernerds  
1.113 ls -l Documents/CyberFiles  
1.114 chmod 752 Documents/CyberFiles/Cybersecurity2022.txt  
1.115 ls -l Documents/CyberFiles  
1.116 chmod g+w Documents/CyberFiles/Cybersecurity2022.txt  
1.117 ls -l Documents/CyberFiles  
1.118 sudo chgrp Cybernerds Documents/CyberFiles/Cybersecurity2022.txt  
1.119 ls -l Documents/CyberFiles  
1.120 sudo chown Namibia Documents/CyberFiles/Cybersecurity2022.txt  
1.121 ls -l Documents/CyberFiles  
1.122 ps -f  
1.123 ps -u AFRICC20  
1.124 w -s AFRICC20  
1.125 date  
1.126 date "+%A"  
1.127 date "+%D"  
1.128 date "+%T"  
1.129 cal  
1.130 host [www.africaricc.org](http://www.africaricc.org)  
1.131 ifconfig  
1.132 ping [www.africaricc.org](http://www.africaricc.org)  
1.133 ssh [africc@africaricc.org](mailto:africc@africaricc.org)  
1.134 ftp [africc@africaricc.org](ftp://africc@africaricc.org)  
1.135 nslookup africc@africaricc.org  
1.136 df -h  
1.137 fsck  
1.138 init 5  
1.139 who -r  
1.140 free -m  
1.141 shutdown -h +5

**Section 2: Perform all the tasks in section 1 (from 1.1 until 1.141) on Parrot OS.**

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