***Full Name: HTI Group No:***

1. Which term describes the interpreter that executes commands typed as strings?

**a. Command b. Console**  c. Shell  **d. Kernel**

2. Which term describes the name of a program to run?

**a. Argument** b. Command **c. Option d. Prompt**

3. Which term describes the part of the command line that adjusts the behavior of a command?

**a. Argument b. Command**  c. Option **d. Prompt**

4. Which term describes the part of the command line that speciﬁes the target that the command should operate on?

a. Argument  **b. Command c. Option d. Prompt**

5. Which directory contains installed software programs and libraries?

**a. /etc b. /lib**  c. /usr  **d. /var**

6. Which directory contains regular commands and utilities?

**a. /commands b. /run**  c. /bin  **d. /sbin**

7. Which directory contains persistent, system-speciﬁc conﬁguration data?

a. /etc  **b. /root c. /run d. /usr**

8. Which directory is the top of the system's ﬁle system hierarchy?

**a. /etc** b. /  **c. /home/ d. /root**

9. Which directory contains user home directories?

**a. /** b. /home  **c. /root d. /user**

10. Which directory contains dynamic data, such as for databases and websites?

**a. /etc b. /run c. /usr** d. /var

11. Which directory is the administrative superuser's home directory?

**a. /etc b. root c. /home/** d. /root

12. Which command displays the absolute path name of the current location?

**a. cd** b. pwd  **c. ls ~ d. ls –d**

12. Which command will always change the working directory up two levels from the current location?

**a. cd ~ b. cd ../** c. cd ../..  **d. cd -u2**

13. Which command lists ﬁles in the current location, using a long format, and including hidden ﬁles?

**a. llong ~ b. ls -a c. ls -l** d. ls –al

14. Which command create a hidden directory name “private” in the current location?

**a. touch private b. mkdir private** c. mkdir .private  **d. mkdir /root/.private**

16. Which item or ﬁle represents the location of the local group information?

**a. home directory b. /etc/passwd c. /etc/GID** d. /etc/group

17. Which item or ﬁle represents the location of the local user account information?

**a. home directory** b. /etc/passwd  **c. /etc/UID d. /etc/group**

**Part2 LAB**

1. **Create User called oracle with UID 5000**

* Sudo adduser oracle
* Sudo usermod oracle -u 5000

1. **Create a Group called “dba” then add oracle to group as a secondary group.**

* Sudo groupadd dba
* Sudo usermod oracle -aG dba
* or nano /etc/group **(then search for dba group then add oracle to it)**
* Sudo groupmems -g dba -l **(to list all user in this group)**

1. **Create file under /home/file1 and change permission to read write execute for owner , read for group and others have no permissions**

* Sudo touch /home/file1
* Sudo chmod 740 /home/file1
* Ls -l /home

1. **How to identify Process ID of Firefox application and send termination signal to PID**

* Pgrep firefox
* Kill -9 4031

1. **When I tried to connect to sshd service system gives me connection refused why and how to solve this issue**

To troubleshoot the "connection refused" issue when trying to connect to the sshd service

* Check Ip address 🡪Ip addr show
* check sshd service status🡪 systemctl status sshd
* check port 🡪grep Port /etc/ssh/sshd\_config

1. **Generate public/private key pair for user root**

* Ssh-keygen (these keys will be saved in ~/.ssh dir.)

1. **Create directory under /home called manager and set group of directory to “dba” and owner go to “oracle”**

* Sudo mkdir /home/manager
* Sudo chown oracle /home/manager
* Ls -ld /home/manager (to check the new owner)
* Sudo chgrp dba /home/manager
* Ls -ld /home/manager (to check the new group)

1. **How to verify IP address, hostname, and Gateway in Linux**

* Hostname 🡪 hostname
* Ip address 🡪 Ip addr show
* Gateway 🡪 Ip route

1. **How to change password for oracle user**

* Sudo passwd oracle

1. **Create archive file /root/backup.tar.gz from /etc/**

* Sudo tar -cvf backup.tar /etc

1. **Configure your machine repository to use Docker repository.**
2. **Install zsh shell**

* Sudo apt update
* Sudo apt upgrade
* Sudo apt install zsh

1. **Configure a cron job that runs every 1 minutes and executes: /bin/echo "Welcome to devops course" as the user oracle.**
2. **Locate all files owned by user "oracle" and copy it under /root/oracle-files**

* Sudo mkdir /root/oracle-files
* Sudo find / -user oracle -exec cp -t /root/oracle-files {} +

1. **create an archive '/root/backup.tar.bz2' of /usr/local directory and compress it with bzip2**

* sudo tar -cvjf /root/backup.tar.bz2 /usr/local

1. **Find a string 'ich' from "/usr/share/dict/words" and put it into /root/lines file**

* To find a string in file using this command:

grep -r ‘ich’ /usr/share/dict/words

* To put it into a file using redirection feature:

grep -r ‘ich’ /usr/share/dict/words > path/to/file

I faced this issue when I am trying to redirect output to this path (/root/lines file)🡪

**-bash: /root/lines\_file: Permission denied**

So I redirected output to this path ~/lines\_file 🡪 grep -r ‘ich’ /usr/share/dict/words > ~/lines\_file

1. **locate all files less than 1M in /etc , save files in /root/systemfiles**

* sudo find /etc -size -1M -exec cp -t /root/systemfiles {} +

1. **Change expire date for all users will be created to be after 20 days.**

* Open /etc/default/useradd
* Set INACTIVE Parameter to 20 🡪 This parameter sets the number of days after a password expires (or after the user's account is created) until the account is permanently disabled.