LINUX INSTALLATION.

(a) Install your choice of Linux distribution eg Ubuntu, Fedora, Debian.

Using a USB Drive

- Most newer computers can boost from USB. You should see a welcome screen prompting you to choose your language and giving you the option to install Ubuntu or try it from USB.
- If your computer doesn't automatically do so, you might need to press the F12 key to bring up the boot menu, but be careful not to hold it down, that can cause error message.

1.] Prepare to install ubuntu.

- We recommend you plug your computer into a power source.
- You should also make sure you have enough space on your computer to install ubuntu.
- We advise you to select Download updates while installing & Install this third-party software now.
- You should also stay connected to internet so you can get the latest update while you install Ubuntu

No.

- If you are not connected to internet you will be asked for wireless network, if available. We advise you to connect during the installation so we can ensure your machine in up to date.

2. Allocate drive space.

- Use the checkboxes to choose whether you would like to Install Ubuntu alongside another operating system or delete your existing ~~update~~ operation system & replace it with Ubuntu, or if you are an advanced user choose the 'something else' option

3. Begin the Installation.

- Depending on your previous selection you can now verify that you have choosen the way in which you would like to install ubuntu
- The Installation process will begin when you click the Install Now button
- Ubuntu needs about 4.5 GB to install, so add few extra GB to allow for your files.

4. Select your location

Of you are connected to the internet, this should be done automatically. check your location is correct and click 'forward' to proceed. If you are unsure of your time zone, type the name of the town you are in or click on map

5. Select your preferred keyboard layout.

click on the language optio you need. If you're not sure, click the Detect Keyboard Layout button for help.

6. Enter your login & password details

7. Learn more about Ubuntu while the System Installs.

8. That's it
All that left to restart your computer & start Enjoying Ubuntu.

No.

c] Customize desktop environment by changing diff default options like changing default back themes, screensavers.

Accessing Appearance Setting.

- To access Appearance setting in Ubuntu left di on Users menu at the to right corner, on the top menu bar & select System settings
- A window will popup will MI setting di into personal, Hardware & System options icons lets first select the Appearance Icon

Changing wallpaper picture

- On the left side of Background part, you can see your current wallpaper.
- On the right side is part where you can select one of ubuntu wallpapers, Clicking on thumbnail our wallpaper will be change

- If you want to select wallpaper from your picture folder, click the drop menu above thumbnail, & select the picture folder.
- You will see the pictures in your picture folder as thumbnails, where you can select them as your wallpaper.

Changing ubuntu theme

- Ubuntu also has an option to change the desktop themes, which in one click will changes the entire way your computer looks.
- To do that, click on the drop-down menu below the wallpaper thumbnail and choose between Ambiance, Radiance & or High contrast.
- Ambiance is a light theme that look a a bit more mac-like while Radiance is the darker brown theme used in Ubuntu by default.

Aim: Installing and executing software

1) Install any package, verify that it was installed and then remove it.

Step 1: First type 'gcc -v' to know if you have already installed gcc compiler or not. If you the output is 'bash: gcc: command not found' then you don't have gcc installed.

Step 2: Type 'sudo apt-get install gcc' After typing this following command installation will take place.

Step 3: Type 'sudo apt-get install build-essential' This will install all the libraries required for C and C++ programming language.

How to uninstall gcc compiler:-

In gcc 5.1.0, although there is no top level Uninstall target, some distributions do have it, particularly gcc, so you can do

Type: cd build/gcc
sudo make uninstall

Scanned with CamScanner

c) Finding man pages by topic: what man pages are available that document file compression

Ans: 'tar', 'zip' are some man pages which are available for document file compression simply type: man tar man zip

d) Finding man pages by section: from the online bring up the man pages for the printf lib function which manual page section are library functions found.

Ans: The number corresponds to which section of the manual page it is from i.e. 1 is the command while 3 is the system stuff. The man page for man itself explains it and lists the std out

There are certain terms that have different pages in different sections (eg: printf as a command appears in section 1, as a 'stdlib' function appears in section 2) in cases like that you can pass the section no. to the man before the page name to choose which one you want or use man -a to show every matching page in a row

PRACTICAL NO: 4

Aim: To study command line

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a) Install new package:-

sudo apt-get install [package name]

b) Remove the installed package

sudo apt-get remove [package name]

c) Find password file in using find command

find /name password

- /usr/share/doc/nss_ldap 253/password/password
- /usr/bin/password
- /etc/pam.d/password
- /etc/password

Find the duplicate password file under root directory

find / -maxdepth 2 -name password

- /etc/password

Find the password under root and 2 level

find / -maxdepth 3 -name password

- /user/bin/password
- /etc/pam.d/password
- /etc/password

#PD

Find the password file b/w lst limit between 2 and 6

find -mindepth 3 -maxdepth 5 -name password

- /user/bin/password
- /etc/pass.d/password

Insert a symbolic link to the file show found in four intrgs

ln -s file1 file2

7 Create an empty file example.txt and move it to / tmp display using relative path

touch example.txt

mv example.txt /tmp

Delete the file moved to /tmp to previous step by absolute method

rm /tmp/example.txt

Find the location of ls, ps and bash command

A where ls

ls -/bin/ls /usr/share/man/man2/ls.2.gz

where ps

ps: /bin/ps /usr/share/maps: /bin/ps/
usr/share/
/man/man/ps/g2

where bash

bash: /bin /bash /etc/bash.bash.rc/ usr/
share/man/man2/bash/.gz

Practical no. 5

File operations

1. Explore mounted file system on your computer.

Ans: df -h

O/P

2. What are the diff ways of exploring mounted file system in linux

Ans: mount

O/P

3) Copying text from file.

- cp command   cat command

O/P

4) Archiving and backup file/work directory using tar, gzip and bzip2 command.

Ans: gzip filename.txt

bzip filename.txt

O/P

6) Use diff command to create diffs of two files
→ diff filename1 filename2

P.c

7) Use patch command to patch a file and analyse the patch versions patch command options.

P.c

LPD

PRACTICAL NO: 6

USE ENVIRONMENT

a) Which account you are logged in? How do you find out?

Ans: who command & whoami

pic

b) Display /etc/shadow file using cat command & understand the importance of shadow file. How it is difficult than passwd file.

Ans: cat /etc/shadow

As with the passwd file, each file in shadow file is also separated with ":" colins characters and are as follows

- Username, up to 8 characters. Case sensitivity, usually all lowercase. A direct match to username in the etc/passwd file.
- Password, 13 character. A blank entry indicates a password is not required to log in and a "*" entry indicates a password is not required to log in. "!"
- The number of day since the password was last changed
- The no of days before password may be changed
- The no. of days after which password may be changed
- The no. of days to warn user of an expiring password.
- The no of days after pass expires that account is disabled.

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- A reserved field for possible future use

Each field in a passwd entry is separated with ":" colon characters and are as follows

- An 'x' in the password field. Passwords are stored in the "/etc/shadow" file.
- Username, up to 8 character, case sensitivity usually all lowercase
- Full name of user. I'm not sure what max length for this field is but try keep it reasonable
- Users "shell account" often set to "/bin/bash" to provide

c) Get your current working directory

Ans: pwd

d) Explore diff ways of getting command history, how to run previously executed command without typing it

Ans: history
!line number

e) Create alias to most commonly used commands
Alias command instructs the shell to replace one string with another string while executing the commands.

Ans: alias label = "command"

LINUX EDITOR : Vi

a) Create, modify, search & navigate a file in editor

i) Creating a file
To create a file, on the terminal type vi followed by filename

ii) Modifying the file:
To modify a file, on the vi editor, type "o"

iii) Search in a file
To find a word press / followed by word to search

iv) Navigate
Movement in four direction

KEY	ACTION
K	Move cursor up
J	Moves cursor down
h	Moves cursor left
l	Moves cursor right

Word Navigation

KEY	ACTION
b	Moves back to begin of word
e	Moves forward to end of word
w	Moves forward to beginning of word
0	Moves to 1st character
$	Moves to End of line