

# Application Laboratory

Lecture 02

# Words of Dr. Ruwan Weerasinghe

- “The less I teach the more you learn.”

# Format of a Linux Command

- ls **<=command** -l **<=option** zxy **<=path to directory**

# Change of meaning/behaviour of options

- Some options (signified by letters) can have different meanings when combined with other main options.
  - eg. xvf and xvfz operate slightly differently

# Creating files with the touch command

# Changing or listing contents of sub directories

- `ls -l zxy`

# Viewing the contents of the parent directory

- `ls -l ..`

# To get help

- man – short for manual



# Types of objects on Linux

- – regular files (usually either ASCII text or binary file)
- d Directory
- l Symbolic link
- c Character special file
- b Block special file
- s Socket (a network listener)
- p Named pipe

# Security and Permissions on Linux

- Types of permissions
  - Read (r) – permission to read a file/directory
  - Write (w) – permission to write to a file/directory
  - Execute (x) – permission to execute

# Security and Permissions on Linux (contd.....)

- Types of users
  - User / u (this user or you/owner of file)
  - Group / g (group to which you belong)
  - Other / o (all other users not in your group)

# Using chmod to change user type and permission

- `chmod g-x, o+r /root/xyz`

# Using numbers to change permissions

- 0 No privileges
- 1 Execute
- 2 Write
- 3 Write and execute
- 4 Read
- 5 Read and execute
- 6 Read and write
- 7 Read, write and execute

# Creating groups using the groupadd command

- The groupadd command in Linux is used to create a new group. Groups are a way to manage users and permissions on a system. Instead of assigning permissions to each user separately, you can assign them to a group and then add users to that group. This simplifies the task of managing permissions for multiple users.

# Packing and unpacking files and directories

- Like you do with Winzip and Winrar on Windows
- Tar – stands for tape archive
- Rpm – stands for redhat package manager

# Tar options

- To look at tar files in archives; tf or tfz options
- To extract files from archives use xvf or xvfz options



# Removing / deleting files

- `rm`

# Removing / deleting directories

- `rmdir`

# Changing password

- passwd