

**LAB**

**LINUX SYSTEM ADMINISTRATION**

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VERSION 2

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**LAB:** LAB19-02

**OBJECTIVE**: The objective of this lab is to learn how to set up and install a new disk.

**INSTRUCTIONS**: These labs will test your ability to actively research how to perform a required action on a Linux operating system. All questions asked (below) should be included in a lab report. This lab report should be written in Microsoft Word and include a numbered list corresponding to the task (below). This list must include a clear screenshot of the command and its output. Please follow the instructions for submitting this assignment on Blackboard.

* You should be logged in as ***labuser1*** with the password ‘P@$$w0rd’
* You must be in the /labs/CH19 folder to complete this lab.
* Devices used: /dev/sdf, /dev/sdg, /dev/sdh

**RAID VOLUME**

1. Using the ***mdadm***[[1]](#footnote-2) command, use the devices ***/dev/sdf***, ***/dev/sdg***, and ***/dev/sdh*** to create a RAID 5 volume at ***/dev/md0***.
2. List your running volume.
3. Make an ext4 filesystem on the new RAID volume at */dev/md0*, do not reserve blocks, and apply the label CIT220-RAID to the volume[[2]](#footnote-3).
4. Mount the new logical volume:
   1. Make a new folder called LAB19-02-RAID under the folder */labs/CH19*
   2. Update the filesystem table and mount the new volume at */labs/CH19/*LAB19-02-RAID[[3]](#footnote-4).
5. Using the mount command, mount the filesystem[[4]](#footnote-5).
6. Set the volume ownership and permissions:
   1. Change the ownership of the LAB19-02-RAID folder to labuser1:labusers1[[5]](#footnote-6).
   2. Set the permissions of the LAB19-02-RAID folder to 02770.

1. You will have to use the ***sudo*** command for these steps. [↑](#footnote-ref-2)
2. You will have to use the ***sudo*** command for these steps. [↑](#footnote-ref-3)
3. You will have to use the ***sudo*** command for these steps. [↑](#footnote-ref-4)
4. You will have to use the ***sudo*** command for these steps. [↑](#footnote-ref-5)
5. You will have to use the ***sudo*** command for these steps. [↑](#footnote-ref-6)