the basic building blocks of cyberspace: hardware, software and networks Modified for Gen Cyber Raspberry Pi

**Hardware and software**

## Introduction to Linux LAB SOLUTIONS

## Submission 1 Answers:

### 1. You are working on the Linux system run the following commands:

$ mkdir .new\_stuff

$ ls

After running these commands, you should notice that you do not see your newly created directory in the output. Why?

The directory begins with a “.” thus, it is a hidden file and will not show with the ls command.

### 2. List all of the subdirectories in the /home/ directory.

**Answer: kali**

### 3. Create a directory in the /home/kali/ folder named whatever you wish. Now what about deleting that directory? How might you do this?

rmdir /mentzell or rmdir /home/kali/mentzell

### 4. What is another name for the Linux Terminal?

Command line interface, shell, console

### 5. What is the difference between relative and absolute DIRECTORIES?

Relative depends on the current working directory. The absolute is the full path to the file, beginning from the root directory (the / at the top of the file tree.

## Submission 2 Answers:

### 1. HOW DO YOU START A PROCESS IN THE BACKGROUND?

By using the &

### 2. WHAT DOES THE CAT COMMAND DO?

Prints the content of a file to the Terminal as output.

### 3. WHAT IS THE DEFAULT IMAGE VIEWER IN KALI LINUX?

Ristretto

4. **WHAT COMMAND WILL DOWNLOAD WEB CONTENT GIVEN A URL IN KALI LINUX?**

wget

## Submission 3 Answers:

### 1. What does sudo translate to? Why is it required for most of the commands we are performing?

Super user do.

It is a special command meant to provide the needed permission to an authorized user to perform certain sensitive tasks. Groups and User manipulations are very sensitive tasks and require a super user to perform it.

### 2. Let’s assume you have a folder named “stuff” and you wish to make “stuff” readable and writable for the owner, readable by groups and others, how would you do this?

chmod 644 stuff

### 3. Interpret these permissions: dr-xrw--w-

* + - * 1. Owner: Read and Execute
  1. Group: Read and Write
  2. Other: Write