



# 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:*

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#### **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.

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#### **2. LIST ALL OF THE SUBDIRECTORIES IN THE /HOME/ DIRECTORY.**

**Answer: kali**



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**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`

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**4. WHAT IS ANOTHER NAME FOR THE LINUX TERMINAL?**

Command line interface, shell, console

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**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).

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**Submission 2 Answers:**

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

By using the `&`

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

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

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

Ristretto

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

wget

### Submission 3 Answers:

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#### 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.

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#### 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`

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#### 3. INTERPRET THESE PERMISSIONS: `DR-XRW--W-`

- a. Owner: Read and Execute
- b. Group: Read and Write
- c. Other: Write