Section 4 Resources

- List of Basic Linux Commands:
  - whoami – prints the username of the current user
  - hostname – prints the hostname of the device
  - pwd – prints the current directory (folder) that you are in
  - ls – lists out the contents of the current directory
  - cd directoryName – changes directory to the indicated directory
  - cd .. – backs out by 1 directory (switch from /home/user to /home)
  - mkdir directoryName – creates a new directory with the indicated name
  - rm filename – deletes the indicated file
  - rmdir – deletes the indicated directory
  - su – username – switches to the indicated user account (may need to enter a password)
  - sudo command – executed any command with root privileges
  - sudo –i – switch to the root user account
  - history – shows a list of recent commands that have been executed
  - ifconfig – prints out ip address and network interface information for the system
  - chmod abc fileName – changes the permissions for the indicated file
- Commands to install software and update software:
  - apt-get install applicationName – looks through online repositories for the
  - apt-get update – searches database for files/applications that can be updated
  - apt-get upgrade – upgrades applications that were determined to be upgradeable
  - apt-get dist-upgrade – downloads and upgrades the Linux distro that you are using to the next version
- Linux Text Editors:
  - Linux has various text editors that should be installed by default that you can use to edit text files
  - vi – old school text editor that is a little more difficult to use, but provides the user with the most possible power
  - vim – updated version of vi with improved user interface and new features
  - nano – user friendly command line text editor
  - leafpad – text editor that uses a graphical interface for editing files similar to what you typically see on windows
    - May need to be downloaded with “apt-get install leafpad”
- Searching for files:
  - locate fileName - searches the computer’s built in database named locate.db for the indicated filename
    - You can update the database with the “updated” command
  - find /directory –name fileName – searches a specific directory for the indicated filename
  - which fileName - searches through directories that are defined in the $PATH environment variable for a given file name
- Important Linux Directories:
  - / - the root directory of the system

    - /etc – contains system configuration files
    - /bin – contains executable binary files of installed applictions
    - /sbin – contains executable binary files of important system applications
    - /var/log – typical location where system logs are stored
    - /home/user – home directory of the specified user where they can add or remove files/directories
- Copying and moving files:
    - cp fileName /path/to/save/file – places a copy of the indicated file in the indicated directory path
    - mv filename /path/to/save/file – moves the indicated file to the indicated directory path
    - Please note that mv will result in the file being deleted in the original location
- Learn more about Linux file permissions:
    - https://www.linux.com/training-tutorials/understanding-linux-file-permissions/
- In order for apt-get commands to work:
    - Ensure that you are connected to the internet with your kali machine (if necessary, add another network adapter to it in the virtualbox settings and choose NAT as the connection type)
    - If you still cannot update or install applications, edit the /etc/apt/sources.list file by doing the following:
        - sudo vi /etc/apt/sources.list
        - Paste the following two lines inside:
            - deb http://http.kali.org/kali kali-rolling main contrib non-free
            - deb-src https://http.kali.org/kali kali-rolling main non-free contrib
        - Save the file and try to update again