ANNEX A

Type the following to discover the directories architecture of your system

a. **cd /**
b. **tree -L 1**

2. Show current working directory

3. List the contents of the working directory with and without information about permissions

4. Go to root directory (hint: **/**)

5. Go to user root's directory (hint: **/root**)

6. List the contents of **/bin** from the user's directory

7. Make a new directory named **bash-tests** inside the **/tmp** directory (remember, nothing will remain there after rebooting)

8. Explore the options of the command used to make a new directory (**mkdir**) and try to make the following chain of subdirectories with a single command (the goal is to create nonexistent middle directories at the same time) :
   a. **/tmp/bash-tests/dir1/dir2/dir3/dir4/dir5**

9. Change to **/tmp/bash-test** directory and once there open a nano editor and copy there the text of the link provided below and save the file as **text-1.txt**:
   a. https://www.dshield.org/block.txt

10. Copy **text-1.txt** to **/tmp/bash-tests/dir1** with a different name (**text-2.txt**).

11. Change the name of **text-2.txt** to **text-3.txt**.
    a. Hint: **mv**

12. Move **text-1.txt** to the same folder in which **text-3.txt** is.

13. Change the owner and group of **text-3.txt**
    a. Hint 1: **chown**
    b. Hint 2: **chgrp**

14. Change the privileges of **text-2.txt** in a way that only you can read the content of the file.
    a. Hint 1: **chmod**
    b. Hint 2: **-r--------**

15. Type <**host** test.com> and filter the output to only display IPs
    a. Hint for beginners: it can be done using just one single **grep** and one single **cut**
    b. Hint for advanced users (-oE): it can be done with a single **grep**

16. Type and execute the following script, and get familiar with the process of creating a simple **for** loop:
    a. **for** NUMBER in $(seq 1 10); **do echo** $NUMBER; **done**
    b. NUMBER is a variable you are defining, that in every round of the loop, will take the value of a number in the sequence 1 to 10 until reaching the last value (which is 10, obviously).
    c. $NUMBER is the way in which you refer to the created variable with that name. The format is $ plus the NAME_OF_VARIABLE.
    d. Just repeat this from time to time to assimilate the fundamentals of scripting in the terminal. This could be a variation that also does the job:
        i. **for** i in $(seq 1 10); **do echo** $i; **done**

17. Show the content of **/tmp/bash-tests/dir1/text-1.txt** using cat.
    a. There you will see a table (below)
    b. Your goal is to show, in a single column, all the emails of that table (14 emails).
    c. Hints:
        i. cat
        ii. **grep**,

iii. **cut**,

iv. **sed** 's/\t/-/g'

18. Update and upgrade your system
    a. **apt-get update** (use sudo if you are not logged as root)
    b. **apt-get upgrade** (use sudo if you are not logged as root)
    c. You could have done both actions with a single line:
        i. **apt-get update && apt-get upgrade -y**

19. Know your system
    a. Type the following commands and see the output
        i. **whoami**
        ii. **id**
        iii. **w**
        iv. **finger $USER**

    b. Read the information provided by the following files:
        i. **/proc/cpuinfo**
        ii. **/proc/meminfo**
        iii. **/proc/version**
            1. **uname -a** will do a similar job
        iv. Hint: use **cat** to show the contents of those files.
    c. Get information about your disks and portable storage devices with **lsblk --nodeps**
    d. Check this commands
        i. **date**
        ii. **cal**
        iii. **uptime**
        iv. **free**
        v. **df**
        vi. **ifconfig**
        vii. **service --status-all**

viii. **ping -c4 8.8.8.8**

20. If the service samba (smbd) is active, stopt it and check that it is really stopped. If it is stopped, just start it and verify that it is active.
    a. If samba was not active, enable the service to start during every startup using **update-rc.d**

21. Extract every single subdomain from www.ebay.com