# Lab 7

**Lab Conditions:**

This lab exercise to be completed by the end of the class. No late submission will be accepted

Submit Word document or PDF file in D2L @ Activities >> Assignments >> Lab 7

Make sure your following naming format as listed below:

Last name, First name \_\_\_\_\_Afonso, Markus\_\_\_\_ Student number: A01333486\_\_\_\_\_\_\_

dir

## Part 1

# Short Answer Questions:

1. Describe the encryption, why it is important to organizations?

Encryption is when data is modified into a state where it can only be converted back to its original state by being decrypted. The data cannot be read until it is decrypted, thus protecting the content of the data.

1. What is the mechanism of encryption?

Encryption uses algorithms to modify data into a form where it can’t be read.

1. What is a computer virus? What is a Trojan?

A virus self-replicates itself, in other words, it infects the computer by spreading as much as possible. A trojan presents itself as a harmless file/program that when opened or executed, releases malware upon the system.

Part 2

The purpose of remaining parts is to familiarize you with the Windows command line (other operating systems have the same concept, typically called a *Shell*).

You will need Windows for this part. (You can use our VM or your own Windows)

Spend some time to check out listed commands, and fill in blanks

|  |  |  |
| --- | --- | --- |
| COMMAND | **Functionality** | **Sample usage** |
| dir | Displays a list of files and subdirectories in a directory. |  |
| md (or mkdir) | Creates a directory. |  |
| cd | Displays the name of or changes the current directory. |  |
| type (or more) | Displays the contents of a text file. |  |
| rmdir | Creates a directory. |  |
| tree | Graphically displays the directory structure of a drive or  path. |  |
| help | Displays commands with their functionality |  |
| set | Displays, sets, or removes Windows environment variables. |  |
| copy | Copies one or more files to another location. |  |
| del | Deletes one or more files. |  |
| for | Runs a specified command for each file in a set of files. |  |
| if | Performs conditional processing in batch programs. |  |
| move | Moves one or more files from one directory to another directory. |  |
| echo | Displays messages, or turns command echoing on or off. |  |
| findstr | Searches for strings in files. |  |

For the “Sample usage”,

you might want to use “folde\_rname” , “file\_name”, “command\_name” or “user\_name” to show

Step 1: Turn on your command line

You could run the cmd.execommand to start the command line. You can do this via the Start menu (just use the Search box to find the cmd.execommand). Another way is to navigate to a folder in Windows Explorer:

SHIFT + right click -> Open Command Window here**.**

Step 2: Once on the command line window, go type in listed commands:

help cls

help start

cls /?

Start /?

Typing the command “help” will tell you what the command does and what arguments the command takes. You can also type: command-name /? to get help.

Optional: You can change the command line prompt more be more “interesting”.

Type help prompt to see the various ways in which you can set your prompt.

For fun, type prompt $P[yourname]$G this will now change to prompt to display your name.

## Task 1: Looking at your user account

Windows organizes files under each user.

To find out who you are:

* whoami

Open a command-line window in your user directory

Run the “dir” command to show your contents, pipe the output to “findstr” command to see if you have a directory listing has a string “Desktop”

* dir | findstr Desktop

# SCREENSHOT 1

Place screenshot of command-line window displaying execution of

above two commands (whoami and dir/findstr)

HERE BELOW:



Graphical user interface, text

Description automatically generated with medium confidence

## Task 2: Files

From the command-line, in the appropriate work directly, create 3 new files. You can name your files as un.txt, deux.txt, trois.txt

So, how do you create a new file without Windows? Try each of these methods:

### Method 1 (good for creating one line at a time only):

* Type: echo un > un.txt OR echo un >> un.txt
* The command echo will echo the string “un” and redirect it to the file called “un.txt”.
* If the file already exists: the single arrow > will overwrite existing contents; the double arrows >> will append new line to the end of the file.

### Method 2:

* Use “copy CON *filename*”
* This command copies what you type in the “console” to a file called “filename”.
* You can type more than one line.
* After you finish typing, use Control-Z to exit and save the file.

### Method 3:

* Use notepad to edit/create file.
* To open notepad from the command line type in notepad.

The contents of un.txt should be: Hello World Un. My name is …..

The contents of deux.txt should be: Hello World Deux. My name is …..

The contents of trois.txt should be: Hello World Trois. My name is ….

Use your own name in the sentence. Use the dir command to verify that the files have all been created. Use the type (or more) command to verify the contents of each file.

# SCREENSHOT 2

Place screenshot of command-line window. displaying DIR and TYPE/MORE command

HERE BELOW:

Text

Description automatically generated

Text

Description automatically generated