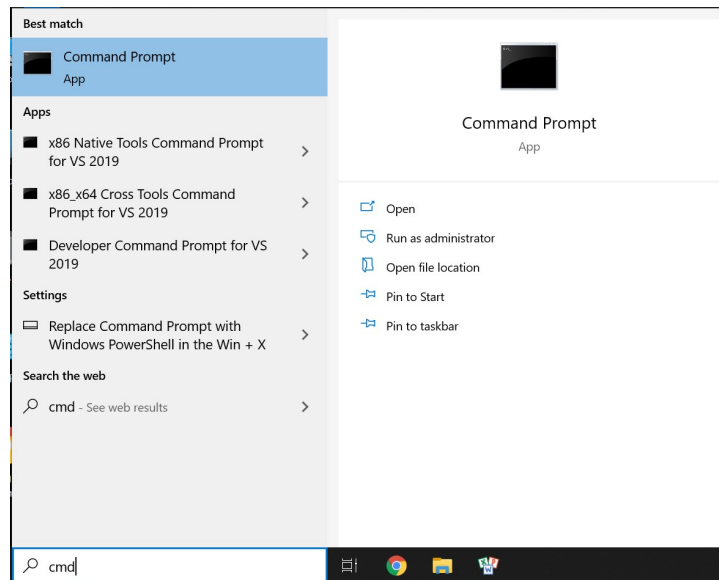


Practical 1 : CLI in Windows and Linux (I)

In this lab, you will use Windows CLI commands to manage folders, files and programs. Thus, you need to have a computer running Windows as the main Operating System.

Navigate to “Run” or go to windows search section and typed in “cmd”.



The command line interface (CLI) windows is opened as below.



Figure 1: CLI

Based on your CLI, which directory / path are you at?

For Figure 1, it's simply Yim Ling / C:\Users\Yim Ling

Now, change the directory/path to root directory / C:\

Just need to type “cd ..” then press “Enter”.

Repeat it and you'll find yourself redirected to the root directory as shown in Figure 2.



```
Microsoft Windows [Version 10.0.18363.900]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Yim Ling>cd ..

C:\Users>cd..

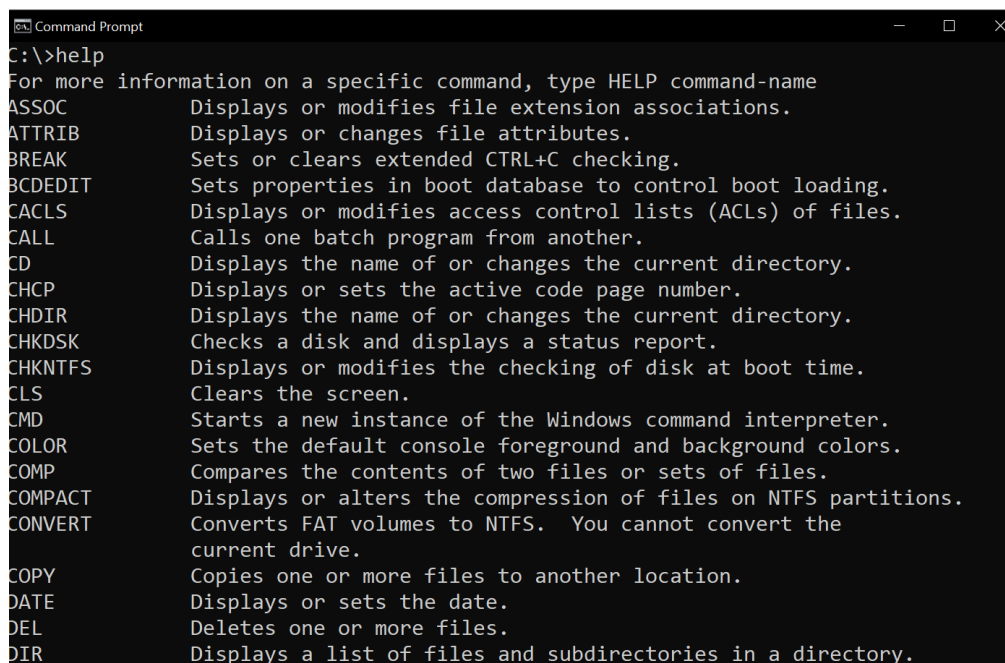
C:\>
```

Figure 2: redirect to root directory.

CD or change (your working) directory simply means you can navigate between directories within a path.

Another way of changing directory straight to root directory is simply typing “cd/”, then press “Enter”.

In order to know the whole list executions you can do with CLI, you may type in “help” then press “Enter”



```
Microsoft Windows [Version 10.0.18363.900]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\>help
For more information on a specific command, type HELP command-name
ASSOC          Displays or modifies file extension associations.
ATTRIB         Displays or changes file attributes.
BREAK          Sets or clears extended CTRL+C checking.
BCDEDIT        Sets properties in boot database to control boot loading.
CACLS          Displays or modifies access control lists (ACLs) of files.
CALL           Calls one batch program from another.
CD             Displays the name of or changes the current directory.
CHCP           Displays or sets the active code page number.
CHDIR          Displays the name of or changes the current directory.
CHKDSK         Checks a disk and displays a status report.
CHKNTFS        Displays or modifies the checking of disk at boot time.
CLS            Clears the screen.
CMD            Starts a new instance of the Windows command interpreter.
COLOR          Sets the default console foreground and background colors.
COMP           Compares the contents of two files or sets of files.
COMPACT        Displays or alters the compression of files on NTFS partitions.
CONVERT        Converts FAT volumes to NTFS. You cannot convert the
               current drive.
COPY           Copies one or more files to another location.
DATE           Displays or sets the date.
DEL            Deletes one or more files.
DIR            Displays a list of files and subdirectories in a directory.
```

Figure 3: List of commands in CLI.

Now let’s visit the basic commands of exploring different directories and files in a Windows system.

While in the root directory, type “dir” then press “Enter”

While looking at the listed Directory of [C:\](#) in the CLI, navigate using Windows GUI to [C:\](#) Directory. What could be derived between these two opened windows?

```

Command Prompt

For more information on tools see the command-line reference

C:\>dir
Volume in drive C is Windows
Volume Serial Number is [REDACTED]

Directory of C:\

14/11/2019  09:52 AM    <DIR>          Intel
14/05/2020  02:04 AM    <DIR>          PerfLogs
18/06/2020  02:39 PM    <DIR>          Program Files
18/06/2020  10:35 AM    <DIR>          Program Files (x86)
12/05/2020  05:28 PM    <DIR>          Users
15/05/2020  12:03 PM    <DIR>          wamp64
13/06/2020  09:14 PM    <DIR>          Windows
             0 File(s)              0 bytes
             7 Dir(s)  178,243,092,480 bytes free

C:\>

```

Figure 4: Details of directory C: in CLI

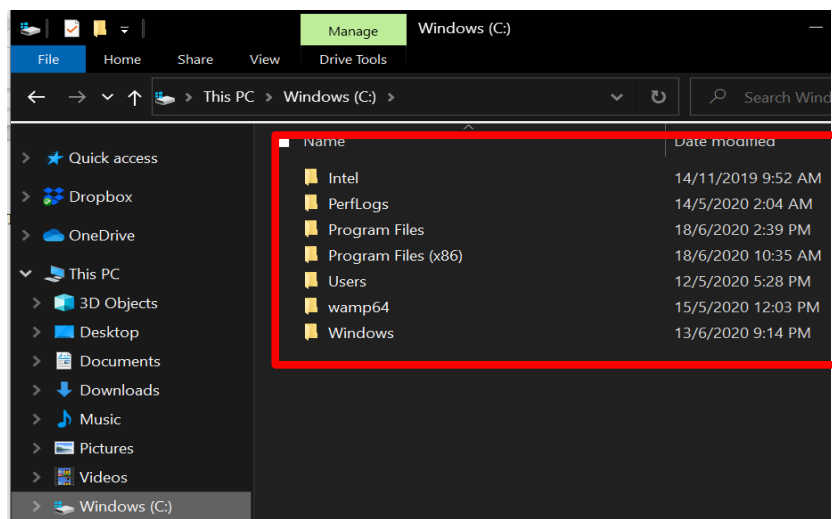


Figure 5: Details of directory C: in GUI

Now, using Windows CLI, let's navigate to Desktop\ directory and use the basic commands to create new directories and files.

```

Command Prompt

Directory of C:\

14/11/2019  09:52 AM    <DIR>          Intel
14/05/2020  02:04 AM    <DIR>          PerfLogs
18/06/2020  02:39 PM    <DIR>          Program Files
18/06/2020  10:35 AM    <DIR>          Program Files (x86)
12/05/2020  05:28 PM    <DIR>          Users
15/05/2020  12:03 PM    <DIR>          wamp64
13/06/2020  09:14 PM    <DIR>          Windows
             0 File(s)              0 bytes
             7 Dir(s)  178,243,563,520 bytes free

C:\>cd Users\Yim Ling\Desktop
C:\Users\Yim Ling\Desktop>

```

Figure 6: Navigate to Desktop directory.

UECS2363 SOFTWARE CONSTRUCTION AND CONFIGURATION

Create a new directory using “md” and “mkdir” command.

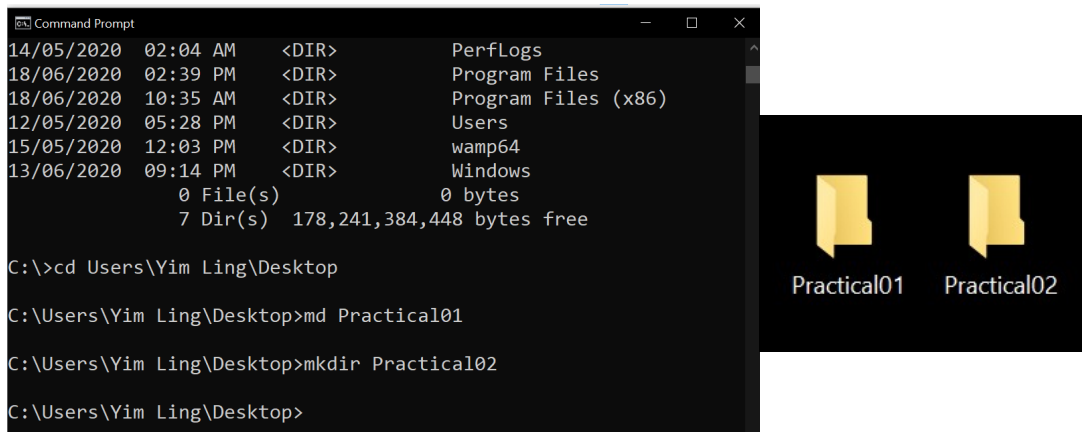


Figure 7: Creation of Practical01 and Practical02 in Desktop directory

Create an empty textfile in Practical01 using “type” command in CLI.

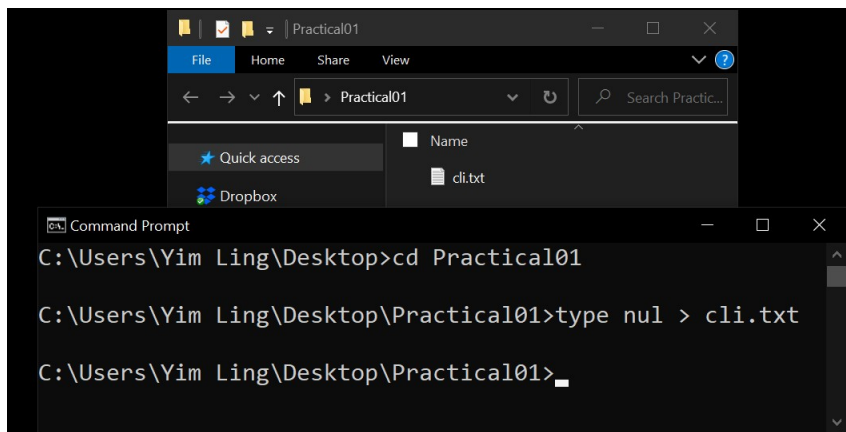


Figure 8: Creation of empty textfile in Practical01 directory.

Now, add some texts into the empty textfile using “echo” command.

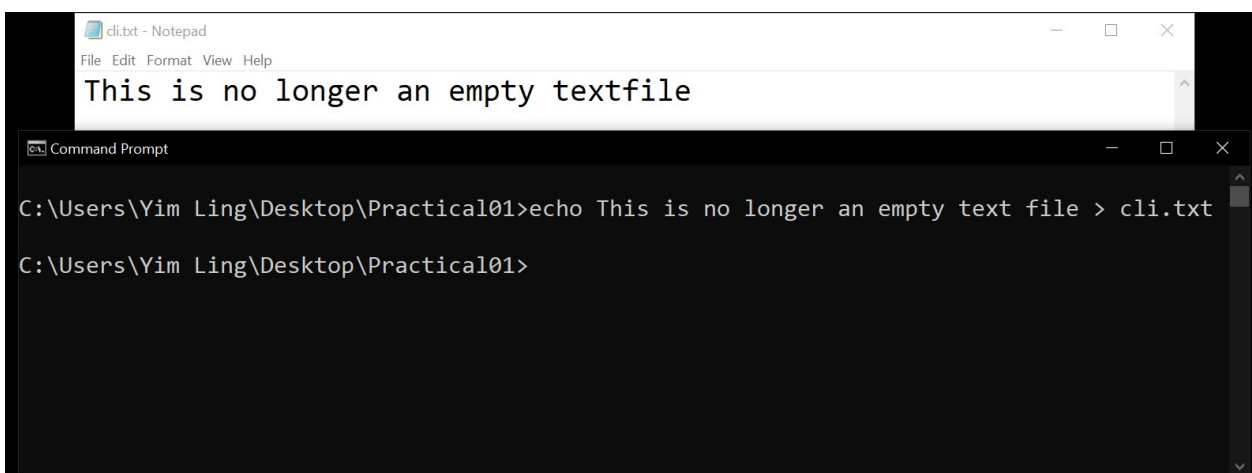


Figure 9: Add texts into an empty text file.

UECS2363 SOFTWARE CONSTRUCTION AND CONFIGURATION

Exercises:

Make changes to the directories where eventually Figure 10 is achieved.

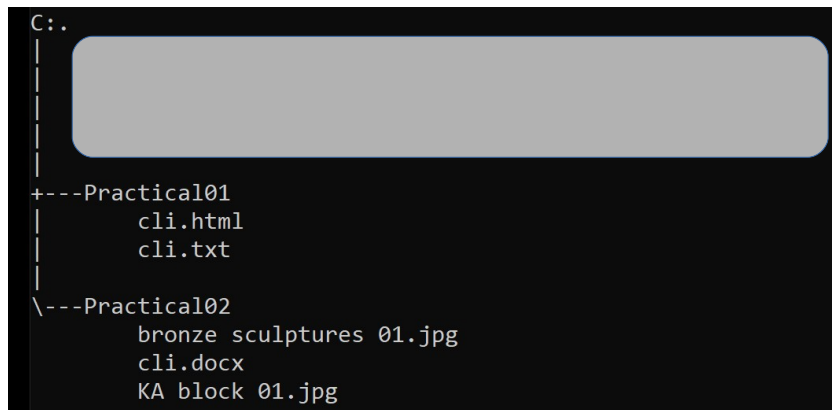


Figure 10: Graphical view of desktop directory.

Detailed requirements;

- 1) An additional file “cli.html” shall be created in Practical01 directory. Using CLI command evoke an editor to edit “cli.html” so that the file generate webpage as shown in Figure 11.

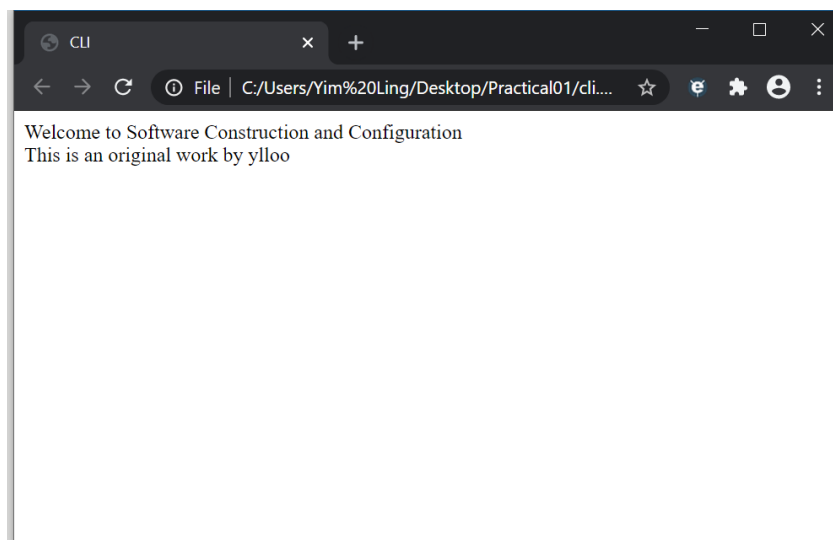


Figure 11: cli.html

- 2) Create an empty .docx document file in Practical02 directory.
- 3) Copy all files from Pictures folder (download some pictures first) into Practical02 directory.
- 4) Using CLI command, generate a graphical view of your desktop directory; similar to Figure 10.