

Command Line

basics

`cls` -

`dir` -

`mkdir <foldername>` -

`cd <directory>` -

`cd..` - moves up to directory once

`cd/` - moves to topmost directory

`c:` or `d:` or `e:` - transfers to different drives in desktop

`exit` - exits the command line

`chkdsk` -

`rmdir <foldertodeleteincurrdir>` - deletes the folder in the directory currently in

`ren <*substringtoreplace> <*newssubstring>` - replaces a substring all files that have the same substring with new substring ex. `ren *.jpg *.png`

`del <filenameincurrdirectory>` - deletes file in current directory

`echo > <filename>.<fileextension>` - creates a file in current directory

network

`ipconfig` -

`ftp` -

`ftype` -

`netsh` -

`netstat` -

`nslookup` -

`pathping` -

`ping` -

`route` -

`systeminfo` -

`telnet` -

`tftp` -

`tracert` -

Enter the command `ipconfig` to see ip address, this will display the following.

Windows IP Configuration

Ethernet adapter Local Area Connection:

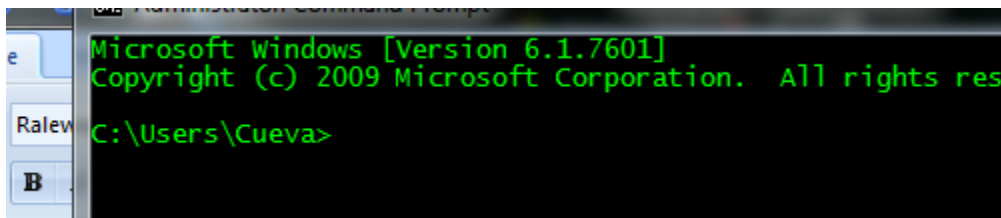
```
Connection-specific DNS Suffix . : bbrouter
IPv6 Address. . . . . : 2001:4451:81f6:2000:69:b02a:7e88:1d9
Temporary IPv6 Address. . . . . : 2001:4451:81f6:2000:50b0:d8:8c5f:c353
Link-local IPv6 Address . . . . . : fe80::69:b02a:7e88:1d9%11
IPv4 Address. . . . . : 192.168.1.4
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : fe80::9261:cff:fe67:92dd%11
                            192.168.1.1
```

Tunnel adapter isatap.bbrouter:

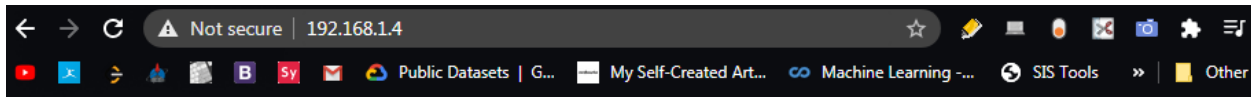
```
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . : bbrouter
```

What we should type in the url is the IPv4 address. At first it will load a page that is unable to connect, but if we enter the command `python -m http.server <optionalportnumberarg>`

From here we can now load the page that was previously unable to connect to the local server. The page will display the files that are in the default path. To confirm this just go to the terminal and notice the first file path it is in right after opening the terminal window



The files in this path will be displayed on the page we have requested using a local server



Directory listing for /

- [.android/](#)
- [.conda/](#)
- [.condarc](#)
- [.config/](#)
- [.dotnet/](#)
- [.idlerc/](#)
- [.ipython/](#)
- [.keras/](#)
- [.matplotlib/](#)
- [.node_repl_history](#)
- [pgAdmin4.391476453.log](#)
- [pgAdmin4 startup log](#)

socket

`socket.socket()` – returns a socket object, whose methods implement various socket system calls

args:

methods:

`self.connect_ex()` -

`self.close()` -

`socket.gaierror()` -

`socket.error()` -

`socket.AF_INET` -

`socket.SOCK_STREAM` -

`socket.setdefaulttimeout` -

sys

`sys.argv` – is an attribute that holds the arguments in array when the python file is ran. Like the c language's argument vector, the keyword that indicates the file to be ran is the first argument “<filename>.py” and the succeeding arguments separated by whitespaces will be treated as the nth argument

```
['sample.py', 'test']
```

`sys.exit(status)` – is a function that will exit the interpreter by raising `SystemExit(status)`. If the `status` argument is omitted or `None`, it defaults to zero (i.e., success). If the status is an integer, it will be used as the system exit status. If it is another kind of object, it will be printed and the system exit status will be one (i.e., failure).

This is also why when we use the python interpreter in the command line when we use the `exit()` function we also execute the same kind of `exit()` function in the `sys` module

OS

`os.remove(string path and directory of file to be deleted)` -

`os.listdir(string directory of different files)` – will list all files in directory

`os.mkdir(string parentdir/nameoffolder, mode=0o777, *, dir_fd=None)` - creates a folder named path with numeric mode 'mode' if the directory already exists `FileExistsError` is raised

`os.rmdir(string parentdir/nameoffolder,*,dir_fd=None)` – removes the folder in the parent directory, if the directory does not exist or is not empty, an `FileNotFoundError` or an `OSError` is raised respectively

`os.rename(path directory of file or directory/folder, newnameoffile or directory/folder)` - raises an exception `FileNotFoundError` if source arg is a file or folder that cannot be found or if folder or file already exists with the new name you specified

shutil

`shutil.move(path of file to be moved, destination path of file to be moved)` - Recursively moves a file or directory (source) to another location (destination) and returns the destination. If the destination directory already exists then `src` is moved inside that directory. Returns a string which is the path of the file that was moved

watchdogs.events

for event handlers and file changes in the system we use the `watchdog.events` module to monitor and act on these events or changes in our directories

1. **create event handler** - the object that will be notified when something happen on the filesystem you are monitoring.

method overriding occurs simply defining in the child class a method with the same name of a method in the parent class. When you define a method in the object you make the latter able to satisfy that method call, so the implementations of its ancestors do not come in play.

The following are some of the useful methods that can be overridden in the `FileSystemEventHandler` class

- `on_any_event`: Catch-all event handler.
- `on_created`: Executed when a file or a directory is created
- `on_modified`: Called when a file or directory is modified.
- `on_moved`: Called when a file or a directory is moved or renamed.
- `on_deleted`: Executed when a file or directory is deleted.

list of errors

KeyboardInterrupt

A function, class, and its methods can be the only ones to be imported and used

automation ideas for faster work

- writing on notepad then transferring it to word
- when flash drive is plugged in automatically copy or move files from a specific folder to the flash drive
- on startup open youtube in google and play youtube created playlist
- on startup open vs code, notepad, and command line

Vague roadmap for skills needed

Linux

Computer networking

Forensics

System administration

Personal digital security

Command line

Using virtual machines

Reverse engineering

Cyber operations

Foreign terminologies:

Recon – finding/observation information, OSINT (open source intelligence, hacker finding open source information)

Tcp/ip – transmissional control protocol/internet protocol, is a set of rules that governs the connection of computer systems to the internet.

Lan – local area network that interconnects hosts that are up to a few or maybe a few tens of km apart

Man – metroplotan area network interconnects devices that are up to a few hundred km apart

Wan – wide area network interconnects devices that can be located anywhere on earth