

Linux commands task

Part 1

1- Create Directories:

```
aya@aya-VirtualBox:~$ mkdir my_app  
aya@aya-VirtualBox:~$ cd my_app  
aya@aya-VirtualBox:~/my_app$ mkdir src assets  
aya@aya-VirtualBox:~/my_app$ ls  
assets src  
aya@aya-VirtualBox:~/my_app$
```

2- Create and Populate files:

```
aya@aya-VirtualBox:~/my_app$ cd src  
aya@aya-VirtualBox:~/my_app/src$ touch main.py  
aya@aya-VirtualBox:~/my_app/src$ cd ..  
aya@aya-VirtualBox:~/my_app$ cd assets  
aya@aya-VirtualBox:~/my_app/assets$ touch config.txt  
aya@aya-VirtualBox:~/my_app$ echo "Default Port: 8080" > assets/config.txt  
aya@aya-VirtualBox:~/my_app$ nano config.txt  
(to check the content of the file)
```

Part 2

1- Create a Symbolic Link:

```
aya@aya-VirtualBox:~/my_app$ ln -s ~/assets/config.txt active_config
```

```
aya@aya-VirtualBox:~/my_app$ ls -l
```

```
active_config
```

```
aya@aya-VirtualBox:~/my_app$
```

2- Find System files:

```
aya@aya-VirtualBox:~/my_app$ find /etc -name services
```

```
find: '/etc/ssl/private': Permission denied
```

```
find: '/etc/cups/ssl': Permission denied
```

```
/etc/services
```

```
/etc/avahi/services
```

```
find: '/etc/polkit-1/localauthority': Permission denied
```

```
aya@aya-VirtualBox:~/my_app$ cp /etc/services assets
```

```
aya@aya-VirtualBox:~/my_app$ cd assets
```

```
aya@aya-VirtualBox:~/my_app/assets$ ls
```

```
config.txt services
```

```
aya@aya-VirtualBox:~/my_app/assets$
```

3- Search File Content:

```
aya@aya-VirtualBox:~/my_app/assets$ grep "http" services
```

```
# Updated from https://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml .
```

```
http      80/tcp      www         # WorldWideWeb HTTP
https     443/tcp                    # http protocol over TLS/SSL
https     443/udp                    # HTTP/3
http-alt   8080/tcp    webcache    # WWW caching service
```

```
aya@aya-VirtualBox:~/my_app/assets$ grep -n "http" services
```

```
3:# Updated from https://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml .
```

```
39:http      80/tcp      www         # WorldWideWeb HTTP
83:https     443/tcp                    # http protocol over
TLS/SSL
84:https     443/udp                    # HTTP/3
263:http-alt 8080/tcp    webcache    # WWW caching service
```

```
aya@aya-VirtualBox:~/my_app/assets$
```

Part 3

1- Verify Directory Structure

```
aya@aya-VirtualBox:~$ tree my_app
```

```
my_app
```

```
└─ active_config -> /home/aya/assets/config.txt
```

```
└─ assets
|   └─ config.txt
|   └─ services
└─ src
    └─ main.py
```

2 directories, 4 files

aya@aya-VirtualBox:~\$

2- Clean Up:

aya@aya-VirtualBox:~/my_app\$ rm active_config

aya@aya-VirtualBox:~/my_app\$ cd ..

aya@aya-VirtualBox:~\$ rm -r my_app

aya@aya-VirtualBox:~\$