Admin2 Lab

1-install nginx

```
radwa@radwa-VirtualBox:~$ sudo apt install nginx
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libnginx-mod-http-geoip2 libnginx-mod-http-image-filter
  libnginx-mod-http-xslt-filter libnginx-mod-mail libnginx-mod-stream
  libnginx-mod-stream-geoip2 nginx-common nginx-core
Suggested packages:
  fcgiwrap nginx-doc
The following NEW packages will be installed:
  libnginx-mod-http-geoip2 libnginx-mod-http-image-filter
  libnginx-mod-http-xslt-filter libnginx-mod-mail libnginx-mod-stream
  libnginx-mod-stream-geoip2 nginx nginx-common nginx-core
0 upgraded, 9 newly installed, 0 to remove and 106 not upgraded.
Need to get 696 kB of archives.
After this operation, 2,395 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us.archive.ubuntu.com/ubuntu jammy-updates/main amd64 nginx-common
all 1.18.0-6ubuntu14.3 [40.0 kB]
Get:2 http://us.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libnginx-mod-
http-geoip2 amd64 1.18.0-6ubuntu14.3 [11.9 kB]
Get:3 http://us.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libnginx-mod-
http-image-filter amd64 1.18.0-6ubuntu14.3 [15.4 kB]
```

2-Enable port 80 on firewall

```
radwa@radwa-VirtualBox:~$ sudo ufw enable
Firewall is active and enabled on system startup
radwa@radwa-VirtualBox:~$ sudo ufw allow 80/tcp
Rule added
Rule added (v6)
radwa@radwa-VirtualBox:~$ sudo ufw status
Status: active
To
                            Action
                                        From
Apache
                            ALLOW
                                        Anywhere
20/tcp
                            DENY
                                        Anywhere
21/tcp
                           DENY
                                        Anywhere
2049/tcp
                           ALLOW
                                        Anywhere
2049/udp
                           ALLOW
                                        Anywhere
80/tcp
                            ALLOW
                                        Anywhere
Apache (v6)
                            ALLOW
                                        Anywhere (v6)
20/tcp (v6)
                            DENY
                                        Anywhere (v6)
                                        Anywhere (v6)
21/tcp (v6)
                            DENY
2049/tcp (v6)
                            ALLOW
                                        Anywhere (v6)
2049/udp (v6)
                            ALLOW
                                        Anywhere (v6)
80/tcp (v6)
                            ALLOW
                                        Anywhere (v6)
```

4-create index.html

```
radwa@radwa-VirtualBox:~$ cd /var/www/html
radwa@radwa-VirtualBox:/var/www/html$ sudo nano index.html
radwa@radwa-VirtualBox:/var/www/html$ sudo systemctl restart nginx
```



Testing page

5-install php-fpm

```
radwa@radwa-VirtualBox:/var/www/html$ sudo apt install php-fpm
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  php8.1-fpm
Suggested packages:
  php-pear
The following NEW packages will be installed:
  php-fpm php8.1-fpm
0 upgraded, 2 newly installed, 0 to remove and 106 not upgraded.
Need to get 1,843 kB of archives.
After this operation, 5,634 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 php8.1-fp,
m amd64 8.1.2-1ubuntu2.11 [1,840 kB]
Get:2 http://us.archive.ubuntu.com/ubuntu jammy/universe amd64 php-fpm all 2:8.1
+92ubuntu1 [2,838 B]
Fetched 1,843 kB in 7s (249 kB/s)
Selecting previously unselected package php8.1-fpm.
```

6-configure main site to enable php-fpm

```
GNU nano 6.2
                         /etc/nginx/sites-available/default *
location ~ \.php${
       include snippets/fastcgi-php.conf;
       fastcgi_pass unix:/run/php/php8.1-fpm.sock;
 of Nginx configuration files in order to fully unleash the power of Nginx.
 https://www.nginx.com/resources/wiki/start/topics/tutorials/config_pitfalls/
 https://wiki.debian.org/Nginx/DirectoryStructure
 In most cases, administrators will remove this file from sites-enabled/ and
 leave it as reference inside of sites-available where it will continue to be
 updated by the nginx packaging team.
 applications, such as Drupal or Wordpress. These applications will be made
 available underneath a path with that package name, such as /drupal8.
 Please see /usr/share/doc/nginx-doc/examples/ for more detailed examples.
^G Help
             ^O Write Out <mark>^W</mark> Where Is
                                       ^K Cut
                                                     ^T Execute
                                                                  ^C Location
               Read File ^\
  Exit
                            Replace
                                          Paste
                                                       Justify
```

7-create index.php file and test it.

```
radwa@radwa-VirtualBox:/$ sudo nano /etc/nginx/sites-available/default
[sudo] password for radwa:
radwa@radwa-VirtualBox:/$ cd /var/www/html
radwa@radwa-VirtualBox:/var/www/html$ sudo nano index.html
```

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0 127.0.0.1

hello everyone