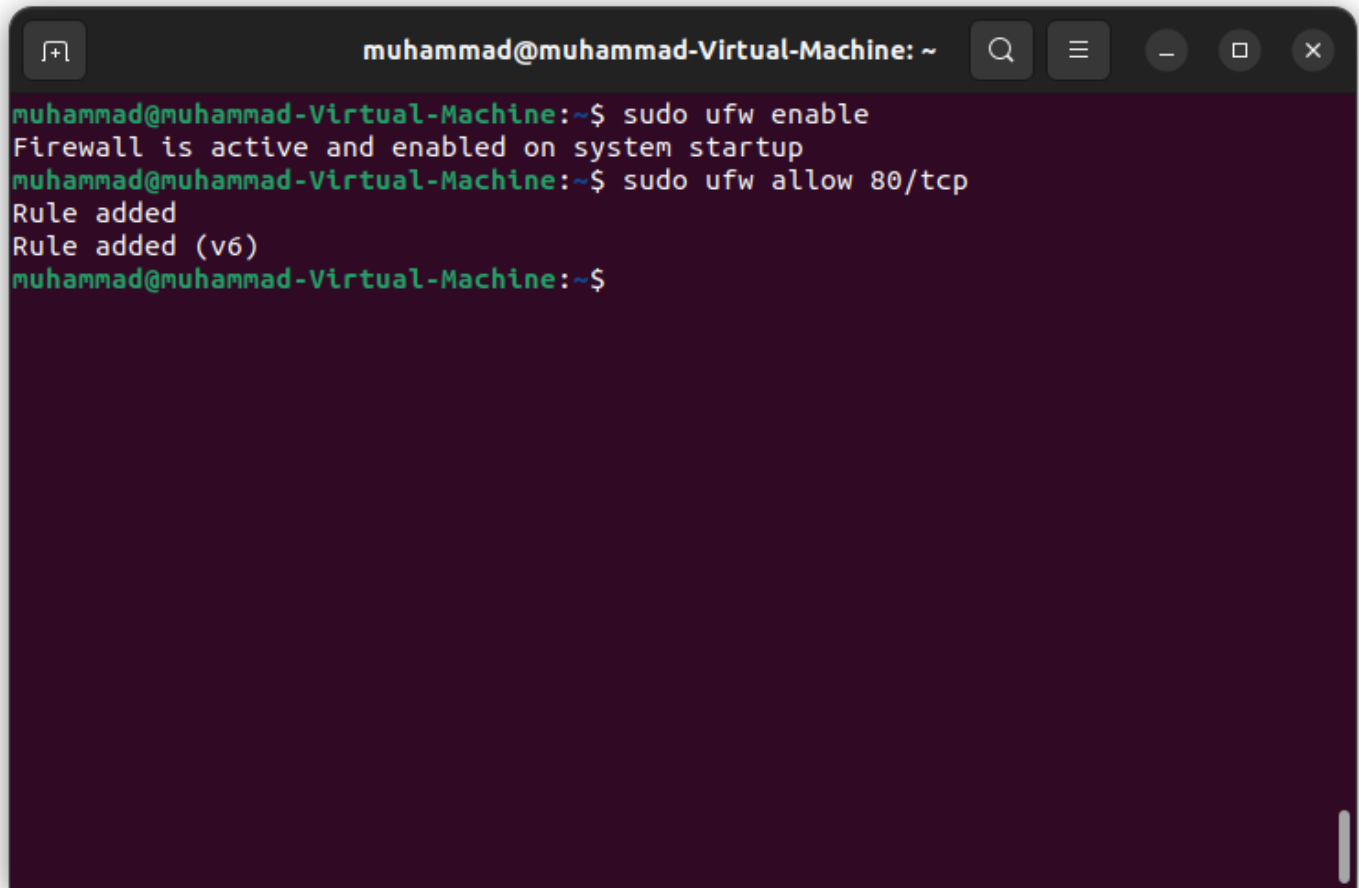


- Using apt , install nginx

```
muhammad@muhammad-Virtual-Machine: ~  
muhammad@muhammad-Virtual-Machine:~$ sudo apt remove apache2  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  apache2-bin apache2-data apache2-utils dctrl-tools dmeventd dmraid  
  dpkg-repack gir1.2-timezonemap-1.0 gir1.2-xkl-1.0 kpartx kpartx-boot libaio1  
  libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap  
  libdebian-installer4 libdevmapper-event1.02.1 libdmraid1.0.0.rc16  
  libdpkg-perl libfile-fcntllock-perl liblvm2cmd2.03 libqt5designer5  
  libqt5help5 libqt5positioning5 libqt5sensors5 libqt5test5 libqt5webchannel5  
  libqt5webkit5 libtimezonemap-data libtimezonemap1 lvm2  
  python3-dbus.mainloop.pyqt5 python3-icu python3-pam python3-pyqt5  
  python3-pyqt5.qtsvg python3-pyqt5.qtwebkit python3-pyqt5.sip rdate  
  thin-provisioning-tools  
Use 'sudo apt autoremove' to remove them.  
The following packages will be REMOVED:  
  apache2  
0 upgraded, 0 newly installed, 1 to remove and 456 not upgraded.  
After this operation, 546 kB disk space will be freed.  
Do you want to continue? [Y/n] y  
(Reading database ... 185067 files and directories currently installed.)  
Removing apache2 (2.4.52-1ubuntu4.4) ...  
Processing triggers for man-db (2.10.2-1) ...
```

```
muhammad@muhammad-Virtual-Machine: ~  
muhammad@muhammad-Virtual-Machine:~$ sudo apt install nginx  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  apache2-bin apache2-data apache2-utils dctrl-tools dmeventd dmraid  
  dpkg-repack gir1.2-timezonemap-1.0 gir1.2-xkl-1.0 kpartx kpartx-boot libaio1  
  libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap  
  libdebian-installer4 libdevmapper-event1.02.1 libdmraid1.0.0.rc16  
  libdpkg-perl libfile-fcntllock-perl liblvm2cmd2.03 libqt5designer5  
  libqt5help5 libqt5positioning5 libqt5sensors5 libqt5test5 libqt5webchannel5  
  libqt5webkit5 libtimezonemap-data libtimezonemap1 lvm2  
  python3-dbus.mainloop.pyqt5 python3-icu python3-pam python3-pyqt5  
  python3-pyqt5.qtsvg python3-pyqt5.qtwebkit python3-pyqt5.sip rdate  
  thin-provisioning-tools  
Use 'sudo apt autoremove' to remove them.  
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
```

- Enable port 80 on the firewall

A terminal window titled "muhammad@muhammad-Virtual-Machine: ~" with standard window controls. The terminal shows the execution of two commands: "sudo ufw enable" and "sudo ufw allow 80/tcp". The first command outputs "Firewall is active and enabled on system startup". The second command outputs "Rule added" and "Rule added (v6)".

```
muhammad@muhammad-Virtual-Machine:~$ sudo ufw enable
Firewall is active and enabled on system startup
muhammad@muhammad-Virtual-Machine:~$ sudo ufw allow 80/tcp
Rule added
Rule added (v6)
muhammad@muhammad-Virtual-Machine:~$
```

- Create `index.html` file on root directory of the server section and test it

```
muhammad@muhammad-Virtual-Machine: /var/www/html
muhammad@muhammad-Virtual-Machine:~$ sudo systemctl start nginx
muhammad@muhammad-Virtual-Machine:~$ cd /var/www/html
muhammad@muhammad-Virtual-Machine:/var/www/html$ sudo nano index.html
muhammad@muhammad-Virtual-Machine:/var/www/html$
```

```
muhammad@muhammad-Virtual-Machine: /var/www/html
GNU nano 6.2 index.html
<h1> Hi i am Muhammad Ashraf </h1>

[ Read 1 line ]
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^_ Go To Line
```



**Hi i am Muhammad Ashraf**

- Install php-fpm package

```
muhammad@muhammad-Virtual-Machine: /var/www/html$ sudo apt install php-fpm
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  apache2-bin apache2-data apache2-utils dctrl-tools dmeventd dmraid dpkg-repack
  gir1.2-timezonemap-1.0 gir1.2-xkl-1.0 kpartx kpartx-boot libaio1 libapr1 libaprutil1
  libaprutil1-dbd-sqlite3 libaprutil1-ldap libdebian-installer4 libdevmapper-event1.02.1
  libdmraid1.0.0.rc16 libdpkg-perl libfile-fcntllock-perl liblvm2cmd2.03 libqt5designer5
  libqt5help5 libqt5positioning5 libqt5sensors5 libqt5test5 libqt5webchannel5
  libqt5webkit5 libtimezonemap-data libtimezonemap1 lvm2 python3-dbus.mainloop.pyqt5
  python3-icu python3-pam python3-pyqt5 python3-pyqt5.qtsvg python3-pyqt5.qtwebkit
  python3-pyqt5.sip rdate thin-provisioning-tools
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  php-common php8.1-cli php8.1-common php8.1-fpm php8.1-opcache php8.1-readline
Suggested packages:
  php-pear
The following NEW packages will be installed:
  php-common php-fpm php8.1-cli php8.1-common php8.1-fpm php8.1-opcache php8.1-readline
0 upgraded, 7 newly installed, 0 to remove and 456 not upgraded.
Need to get 5,193 kB of archives.
```

- configure main site to enable `php-fpm`

```
muhammad@muhammad-Virtual-Machine: /var/www/html
muhammad@muhammad-Virtual-Machine:/var/www/html$ sudo nano /etc/nginx/sites-available/default
t
muhammad@muhammad-Virtual-Machine:/var/www/html$
```

```
muhammad@muhammad-Virtual-Machine: /var/www/html
GNU nano 6.2 /etc/nginx/sites-available/default

# pass PHP scripts to FastCGI server
#
location ~ \.php$ {
    include snippets/fastcgi-php.conf;

    #
    # With php-fpm (or other unix sockets):
    fastcgi_pass unix:/run/php/php8.1-fpm.sock;
    # With php-cgi (or other tcp sockets):
    fastcgi_pass 127.0.0.1:9000;
}

# deny access to .htaccess files, if Apache's document root
# concurs with nginx's one
#
#location ~ /\.ht {
#    deny all;
#}
}

[ Wrote 91 lines ]
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^_ Go To Line
```

- create `index.php` file and test it.

```
muhammad@muhammad-Virtual-Machine: /var/www/html
muhammad@muhammad-Virtual-Machine:/var/www/html$ sudo nano index.php
muhammad@muhammad-Virtual-Machine:/var/www/html$ sudo service nginx restart
muhammad@muhammad-Virtual-Machine:/var/www/html$
```

```
GNU nano 6.2 index.php
<?php echo "Muhammad Ashraf From PHP" ?>
```

[ Wrote 1 line ]

<b>^G</b> Help	<b>^O</b> Write Out	<b>^W</b> Where Is	<b>^K</b> Cut	<b>^T</b> Execute	<b>^C</b> Location
<b>^X</b> Exit	<b>^R</b> Read File	<b>^_\</b> Replace	<b>^U</b> Paste	<b>^J</b> Justify	<b>^/</b> Go To Line





Muhammad Ashraf From PHP