Install Nginx Server and Configure through Https and lets encypt certificate tsl / ssl

Steps:

Register or get Domain name or subdomain

Configure route53 and record set

Get the name server records

Go to domain name provider and change the settings in Dns name server and public ip address change as per route53 records in to domain name provider to redirect the web site.

Then install nginx server on ubuntu through ssh (Screenshots are as below)

```
Vishals-MacBook-Air:Downloads vishalrawal$ ssh -i "TouchProject1.pem" ec2-user@18.222.93.255
The authenticity of host '18.222.93.255 (18.222.93.255)' can't be established.
ECDSA key fingerprint is SHA256:ueIYcsXzgpC6p3tnQiIvXFg6JNTi4CIlfHMXJMEU/KY.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '18.222.93.255' (ECDSA) to the list of known hosts.

       __|  __|_  )
       _|  (     /   Amazon Linux 2 AMI
      ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
-bash: warning: setlocale: LC_CTYPE: cannot change locale (UTF-8): No such file or directory
[ec2-user@ip-10-0-1-130 ~]$ Connection to 18.222.93.255 closed by remote host.
Connection to 18.222.93.255 closed.
Vishals-MacBook-Air:Downloads vishalrawal$ chmod 400 touchproject.pem
Vishals-MacBook-Air:Downloads vishalrawal$ ssh -i "touchproject.pem" ubuntu@3.135.205.39
The authenticity of host '3.135.205.39 (3.135.205.39)' can't be established.
ECDSA key fingerprint is SHA256:syGtGfnE+DR94ZPYSl+ycKso7xBmvArRz1Q/plOsFbw.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '3.135.205.39' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-1051-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

  System information as of Wed Jan  1 00:31:07 UTC 2020

  System load:  0.34              Processes:           88
  Usage of /:   13.6% of 7.69GB   Users logged in:     0
  Memory usage: 15%               IP address for eth0: 10.0.1.57
  Swap usage:   0%

0 packages can be updated.
0 updates are security updates.


The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-10-0-1-57:~$ apt update
Reading package lists... Done
E: Could not open lock file /var/lib/apt/lists/lock - open (13: Permission denied)
E: Unable to lock directory /var/lib/apt/lists/
W: Problem unlinking the file /var/cache/apt/pkgcache.bin - RemoveCaches (13: Permission denied)
W: Problem unlinking the file /var/cache/apt/srcpkgcache.bin - RemoveCaches (13: Permission denied)
ubuntu@ip-10-0-1-57:~$ apt install python-pip -y
E: Could not open lock file /var/lib/dpkg/lock-frontend - open (13: Permission denied)
E: Unable to acquire the dpkg frontend lock (/var/lib/dpkg/lock-frontend), are you root?
ubuntu@ip-10-0-1-57:~$ pip install ansible

Command 'pip' not found, but can be installed with:

sudo apt install python-pip


ubuntu@ip-10-0-1-57:~$ sudo apt install python-pip -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
E: Unable to locate package python-pip
ubuntu@ip-10-0-1-57:~$ pip install ansible

Command 'pip' not found, but can be installed with:

sudo apt install python-pip

ubuntu@ip-10-0-1-57:~$ sudo pip install ansible
sudo: pip: command not found
ubuntu@ip-10-0-1-57:~$ sudo apt install python-pip -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
E: Unable to locate package python-pip
ubuntu@ip-10-0-1-57:~$ sudo apt-get install software-properties-common
Reading package lists... Done
Building dependency tree
Reading state information... Done
software-properties-common is already the newest version (0.96.24.32.11).
software-properties-common set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
ubuntu@ip-10-0-1-57:~$ sudo apt-add-repository universe
'universe' distribution component is already enabled for all sources.
ubuntu@ip-10-0-1-57:~$ sudo apt-get update
Hit:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic InRelease
Get:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates InRelease [88.7 kB]
Get:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-backports InRelease [74.6 kB]
Get:4 http://security.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]
Get:5 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/universe amd64 Packages [8570 kB]
Get:6 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/universe Translation-en [4941 kB]
Get:7 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/multiverse amd64 Packages [151 kB]
Get:8 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/multiverse Translation-en [108 kB]
Get:9 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 Packages [817 kB]
Get:10 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main Translation-en [288 kB]
Get:11 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/restricted amd64 Packages [24.1 kB]
Get:12 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/restricted Translation-en [6620 B]
Get:13 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 Packages [1033 kB]
Get:14 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/universe Translation-en [319 kB]
Get:15 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/multiverse amd64 Packages [9284 B]
Get:16 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/multiverse Translation-en [4508 B]
Get:17 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-backports/main amd64 Packages [2512 B]
Get:18 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-backports/main Translation-en [1644 B]
Get:19 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-backports/universe amd64 Packages [4028 B]
Get:20 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-backports/universe Translation-en [1856 B]
Get:21 http://security.ubuntu.com/ubuntu bionic-security/main amd64 Packages [593 kB]
Get:22 http://security.ubuntu.com/ubuntu bionic-security/main Translation-en [194 kB]
Get:23 http://security.ubuntu.com/ubuntu bionic-security/restricted amd64 Packages [15.1 kB]
Get:24 http://security.ubuntu.com/ubuntu bionic-security/restricted Translation-en [4684 B]
Get:25 http://security.ubuntu.com/ubuntu bionic-security/universe amd64 Packages [627 kB]
Get:26 http://security.ubuntu.com/ubuntu bionic-security/universe Translation-en [210 kB]
Get:27 http://security.ubuntu.com/ubuntu bionic-security/multiverse amd64 Packages [6120 B]
Get:28 http://security.ubuntu.com/ubuntu bionic-security/multiverse Translation-en [2600 B]
Fetched 18.2 MB in 4s (4909 kB/s)
Reading package lists... Done
ubuntu@ip-10-0-1-57:~$ sudo apt-get install python-pip
Reading package lists... Done
Building dependency tree
Reading state information... Done
```

```
The following additional packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu build-essential cpp cpp-7
  dpkg-dev fakeroot g++ g++-7 gcc gcc-7 gcc-7-base libalgorithm-diff-perl
  libalgorithm-diff-xs-perl libalgorithm-merge-perl libasan4 libatomic1
  libbinutils libc-dev-bin libc6-dev libcc1-0 libcilkrts5 libdpkg-perl
  libexpat1-dev libfakeroot libfile-fcntllock-perl libgcc-7-dev libgomp1
  libisl19 libitm1 liblsan0 libmpc3 libmpx2 libpython-all-dev libpython-dev
  libpython-stdlib libpython2.7 libpython2.7-dev libpython2.7-minimal
  libpython2.7-stdlib libquadmath0 libstdc++-7-dev libtsan0 libubsan0
  linux-libc-dev make manpages-dev python python-all python-all-dev
  python-asn1crypto python-cffi-backend python-crypto python-cryptography
  python-dbus python-dev python-enum34 python-gi python-idna python-ipaddress
  python-keyring python-keyrings.alt python-minimal python-pip-whl
  python-pkg-resources python-secretstorage python-setuptools python-six
  python-wheel python-xdg python2.7 python2.7-dev python2.7-minimal
Suggested packages:
  binutils-doc cpp-doc gcc-7-locales debian-keyring g++-multilib
  g++-7-multilib gcc-7-doc libstdc++6-7-dbg gcc-multilib autoconf automake
  libtool flex bison gdb gcc-doc gcc-7-multilib libgcc1-dbg libgomp1-dbg
  libitm1-dbg libatomic1-dbg libasan4-dbg liblsan0-dbg libtsan0-dbg
  libubsan0-dbg libcilkrts5-dbg libmpx2-dbg libquadmath0-dbg glibc-doc bzr
  libstdc++-7-doc make-doc python-doc python-tk python-crypto-doc
  python-cryptography-doc python-cryptography-vectors python-dbus-dbg
  python-dbus-doc python-enum34-doc python-gi-cairo gnome-keyring
  libkf5wallet-bin gir1.2-gnomekeyring-1.0 python-fs python-gdata
  python-keyczar python-secretstorage-doc python-setuptools-doc python2.7-doc
  binfmt-support
The following NEW packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu build-essential cpp cpp-7
  dpkg-dev fakeroot g++ g++-7 gcc gcc-7 gcc-7-base libalgorithm-diff-perl
  libalgorithm-diff-xs-perl libalgorithm-merge-perl libasan4 libatomic1
  libbinutils libc-dev-bin libc6-dev libcc1-0 libcilkrts5 libdpkg-perl
  libexpat1-dev libfakeroot libfile-fcntllock-perl libgcc-7-dev libgomp1
  libisl19 libitm1 liblsan0 libmpc3 libmpx2 libpython-all-dev libpython-dev
  libpython-stdlib libpython2.7 libpython2.7-dev libpython2.7-minimal
  libpython2.7-stdlib libquadmath0 libstdc++-7-dev libtsan0 libubsan0
  linux-libc-dev make manpages-dev python python-all python-all-dev
  python-asn1crypto python-cffi-backend python-crypto python-cryptography
  python-dbus python-dev python-enum34 python-gi python-idna python-ipaddress
  python-keyring python-keyrings.alt python-minimal python-pip python-pip-whl
  python-pkg-resources python-secretstorage python-setuptools python-six
  python-wheel python-xdg python2.7 python2.7-dev python2.7-minimal
0 upgraded, 75 newly installed, 0 to remove and 71 not upgraded.
Need to get 74.2 MB of archives.
After this operation, 235 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpython2.7-minimal amd64 2.7.17-1~18.04 [335 kB]
Get:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python2.7-minimal amd64 2.7.17-1~18.04 [1294 kB]
Get:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 python-minimal amd64 2.7.15-rc1-1 [28.1 kB]
Get:4 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpython2.7-stdlib amd64 2.7.17-1~18.04 [1915 kB]
Get:5 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python2.7 amd64 2.7.17-1~18.04 [248 kB]
Get:6 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libpython-stdlib amd64 2.7.15-rc1-1 [7620 B]
Get:7 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 python amd64 2.7.15-rc1-1 [140 kB]
Get:8 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 binutils-common amd64 2.30-21ubuntu1~18.04.2 [193 kB]
Get:9 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libbinutils amd64 2.30-21ubuntu1~18.04.2 [503 kB]
Get:10 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 binutils-x86-64-linux-gnu amd64 2.30-21ubuntu1~18.04.2 [1856 kB]
Get:11 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 binutils amd64 2.30-21ubuntu1~18.04.2 [3396 B]
Get:12 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libc-dev-bin amd64 2.27-3ubuntu1 [71.8 kB]
Get:13 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 linux-libc-dev amd64 4.15.0-72.81 [1000 kB]
Get:14 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libc6-dev amd64 2.27-3ubuntu1 [2587 kB]
Get:15 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 gcc-7-base amd64 7.4.0-1ubuntu1~18.04.1 [18.9 kB]
Get:16 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libisl19 amd64 0.19-1 [551 kB]
Get:17 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libmpc3 amd64 1.1.0-1 [40.8 kB]
```

```
Extracting templates from packages: 100%
Selecting previously unselected package libpython2.7-minimal:amd64.
(Reading database ... 56531 files and directories currently installed.)
Preparing to unpack .../0-libpython2.7-minimal_2.7.17-1~18.04_amd64.deb ...
Unpacking libpython2.7-minimal:amd64 (2.7.17-1~18.04) ...
Selecting previously unselected package python2.7-minimal.
Preparing to unpack .../1-python2.7-minimal_2.7.17-1~18.04_amd64.deb ...
Unpacking python2.7-minimal (2.7.17-1~18.04) ...
Selecting previously unselected package python-minimal.
Preparing to unpack .../2-python-minimal_2.7.15-rc1-1_amd64.deb ...
Unpacking python-minimal (2.7.15~rc1-1) ...
Selecting previously unselected package libpython2.7-stdlib:amd64.
Preparing to unpack .../3-libpython2.7-stdlib_2.7.17-1~18.04_amd64.deb ...
Unpacking libpython2.7-stdlib:amd64 (2.7.17-1~18.04) ...
Selecting previously unselected package python2.7.
Preparing to unpack .../4-python2.7_2.7.17-1~18.04_amd64.deb ...
Unpacking python2.7 (2.7.17-1~18.04) ...
Selecting previously unselected package libpython-stdlib:amd64.
Preparing to unpack .../5-libpython-stdlib_2.7.15-rc1-1_amd64.deb ...
Unpacking libpython-stdlib:amd64 (2.7.15~rc1-1) ...
Setting up libpython2.7-minimal:amd64 (2.7.17-1~18.04) ...
Setting up python2.7-minimal (2.7.17-1~18.04) ...
Linking and byte-compiling packages for runtime python2.7...
Setting up python-minimal (2.7.15~rc1-1) ...
Selecting previously unselected package python.
(Reading database ... 57279 files and directories currently installed.)
Preparing to unpack .../00-python_2.7.15-rc1-1_amd64.deb ...
Unpacking python (2.7.15~rc1-1) ...
Selecting previously unselected package binutils-common:amd64.
Preparing to unpack .../01-binutils-common_2.30-21ubuntu1~18.04.2_amd64.deb ...
Unpacking binutils-common:amd64 (2.30-21ubuntu1~18.04.2) ...
Selecting previously unselected package libbinutils:amd64.
Preparing to unpack .../02-libbinutils_2.30-21ubuntu1~18.04.2_amd64.deb ...
Unpacking libbinutils:amd64 (2.30-21ubuntu1~18.04.2) ...
Selecting previously unselected package binutils-x86-64-linux-gnu.
Preparing to unpack .../03-binutils-x86-64-linux-gnu_2.30-21ubuntu1~18.04.2_amd64.deb ...
Unpacking binutils-x86-64-linux-gnu (2.30-21ubuntu1~18.04.2) ...
Selecting previously unselected package binutils.
Preparing to unpack .../04-binutils_2.30-21ubuntu1~18.04.2_amd64.deb ...
Unpacking binutils (2.30-21ubuntu1~18.04.2) ...
Selecting previously unselected package libc-dev-bin.
Preparing to unpack .../05-libc-dev-bin_2.27-3ubuntu1_amd64.deb ...
Unpacking libc-dev-bin (2.27-3ubuntu1) ...
Selecting previously unselected package linux-libc-dev:amd64.
Preparing to unpack .../06-linux-libc-dev_4.15.0-72.81_amd64.deb ...
Unpacking linux-libc-dev:amd64 (4.15.0-72.81) ...
Selecting previously unselected package libc6-dev:amd64.
Preparing to unpack .../07-libc6-dev_2.27-3ubuntu1_amd64.deb ...
Unpacking libc6-dev:amd64 (2.27-3ubuntu1) ...
Selecting previously unselected package gcc-7-base:amd64.
Preparing to unpack .../08-gcc-7-base_7.4.0-1ubuntu1~18.04.1_amd64.deb ...
Unpacking gcc-7-base:amd64 (7.4.0-1ubuntu1~18.04.1) ...
Selecting previously unselected package libisl19:amd64.
Preparing to unpack .../09-libisl19_0.19-1_amd64.deb ...
Unpacking libisl19:amd64 (0.19-1) ...
Selecting previously unselected package libmpc3:amd64.
Preparing to unpack .../10-libmpc3_1.1.0-1_amd64.deb ...
Unpacking libmpc3:amd64 (1.1.0-1) ...
Selecting previously unselected package cpp-7.
Preparing to unpack .../11-cpp-7_7.4.0-1ubuntu1~18.04.1_amd64.deb ...
Unpacking cpp-7 (7.4.0-1ubuntu1~18.04.1) ...
Selecting previously unselected package cpp.
Preparing to unpack .../12-cpp_4%3a7.4.0-1ubuntu2.3_amd64.deb ...
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Unpacking libjbig0:amd64 (2.1-3.1build1) ...
Selecting previously unselected package libtiff5:amd64.
Preparing to unpack .../06-libtiff5_4.0.9-5ubuntu0.3_amd64.deb ...
Unpacking libtiff5:amd64 (4.0.9-5ubuntu0.3) ...
Selecting previously unselected package libwebp6:amd64.
Preparing to unpack .../07-libwebp6_0.6.1-2_amd64.deb ...
Unpacking libwebp6:amd64 (0.6.1-2) ...
Selecting previously unselected package libxpm4:amd64.
Preparing to unpack .../08-libxpm4_1%3a3.5.12-1_amd64.deb ...
Unpacking libxpm4:amd64 (1:3.5.12-1) ...
Selecting previously unselected package libgd3:amd64.
Preparing to unpack .../09-libgd3_2.2.5-4ubuntu0.3_amd64.deb ...
Unpacking libgd3:amd64 (2.2.5-4ubuntu0.3) ...
Selecting previously unselected package nginx-common.
Preparing to unpack .../10-nginx-common_1.14.0-0ubuntu1.6_all.deb ...
Unpacking nginx-common (1.14.0-0ubuntu1.6) ...
Selecting previously unselected package libnginx-mod-http-geoip.
Preparing to unpack .../11-libnginx-mod-http-geoip_1.14.0-0ubuntu1.6_amd64.deb ...
Unpacking libnginx-mod-http-geoip (1.14.0-0ubuntu1.6) ...
Selecting previously unselected package libnginx-mod-http-image-filter.
Preparing to unpack .../12-libnginx-mod-http-image-filter_1.14.0-0ubuntu1.6_amd64.deb ...
Unpacking libnginx-mod-http-image-filter (1.14.0-0ubuntu1.6) ...
Selecting previously unselected package libnginx-mod-http-xslt-filter.
Preparing to unpack .../13-libnginx-mod-http-xslt-filter_1.14.0-0ubuntu1.6_amd64.deb ...
Unpacking libnginx-mod-http-xslt-filter (1.14.0-0ubuntu1.6) ...
Selecting previously unselected package libnginx-mod-mail.
Preparing to unpack .../14-libnginx-mod-mail_1.14.0-0ubuntu1.6_amd64.deb ...
Unpacking libnginx-mod-mail (1.14.0-0ubuntu1.6) ...
Selecting previously unselected package libnginx-mod-stream.
Preparing to unpack .../15-libnginx-mod-stream_1.14.0-0ubuntu1.6_amd64.deb ...
Unpacking libnginx-mod-stream (1.14.0-0ubuntu1.6) ...
Selecting previously unselected package nginx-core.
Preparing to unpack .../16-nginx-core_1.14.0-0ubuntu1.6_amd64.deb ...
Unpacking nginx-core (1.14.0-0ubuntu1.6) ...
Selecting previously unselected package nginx.
Preparing to unpack .../17-nginx_1.14.0-0ubuntu1.6_all.deb ...
Unpacking nginx (1.14.0-0ubuntu1.6) ...
Setting up libjbig0:amd64 (2.1-3.1build1) ...
Setting up fonts-dejavu-core (2.37-1) ...
Setting up nginx-common (1.14.0-0ubuntu1.6) ...
Created symlink /etc/systemd/system/multi-user.target.wants/nginx.service → /lib/systemd/system/nginx.service.
Setting up libjpeg-turbo8:amd64 (1.5.2-0ubuntu5.18.04.3) ...
Setting up libnginx-mod-mail (1.14.0-0ubuntu1.6) ...
Setting up libxpm4:amd64 (1:3.5.12-1) ...
Setting up libnginx-mod-http-xslt-filter (1.14.0-0ubuntu1.6) ...
Setting up libnginx-mod-http-geoip (1.14.0-0ubuntu1.6) ...
Setting up libwebp6:amd64 (0.6.1-2) ...
Setting up libjpeg8:amd64 (8c-2ubuntu8) ...
Setting up fontconfig-config (2.12.6-0ubuntu2) ...
Setting up libnginx-mod-stream (1.14.0-0ubuntu1.6) ...
Setting up libtiff5:amd64 (4.0.9-5ubuntu0.3) ...
Setting up libfontconfig1:amd64 (2.12.6-0ubuntu2) ...
Setting up libgd3:amd64 (2.2.5-4ubuntu0.3) ...
Setting up libnginx-mod-http-image-filter (1.14.0-0ubuntu1.6) ...
Setting up nginx-core (1.14.0-0ubuntu1.6) ...
Setting up nginx (1.14.0-0ubuntu1.6) ...
Processing triggers for systemd (237-3ubuntu10.29) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
Processing triggers for ufw (0.36-0ubuntu0.18.04.1) ...
Processing triggers for ureadahead (0.100.0-21) ...
Processing triggers for libc-bin (2.27-3ubuntu1) ...
ubuntu@ip-10-0-1-57:~$ sudo service nginx start
ubuntu@ip-10-0-1-57:~$
```

```
ubuntu@ip-10-0-1-57:~$ sudo apt install ansible
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  ieee-data python-certifi python-chardet python-httplib2 python-jinja2
  python-jmespath python-kerberos python-libcloud python-lockfile
  python-markupsafe python-netaddr python-openssl python-paramiko
  python-pyasn1 python-requests python-selinux python-simplejson
  python-urllib3 python-xmltodict python-yaml
Suggested packages:
  cowsay sshpass python-jinja2-doc python-lockfile-doc ipython
  python-netaddr-docs python-openssl-doc python-openssl-dbg python-gssapi
  python-socks python-ntlm
Recommended packages:
  python-winrm
The following NEW packages will be installed:
  ansible ieee-data python-certifi python-chardet python-httplib2
  python-jinja2 python-jmespath python-kerberos python-libcloud
  python-lockfile python-markupsafe python-netaddr python-openssl
  python-paramiko python-pyasn1 python-requests python-selinux
  python-simplejson python-urllib3 python-xmltodict python-yaml
0 upgraded, 21 newly installed, 0 to remove and 71 not upgraded.
Need to get 7278 kB of archives.
After this operation, 57.8 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 python-markupsafe amd64 1.0-1build1 [13.0 kB]
Get:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python-jinja2 all 2.10-1ubuntu0.18.04.1 [94.8 kB]
Get:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 python-pyasn1 all 0.4.2-3 [46.7 kB]
Get:4 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python-paramiko all 2.0.0-1ubuntu1.2 [110 kB]
Get:5 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 python-yaml amd64 3.12-1build2 [115 kB]
Get:6 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python-httplib2 all 0.9.2+dfsg-1ubuntu0.1 [34.7 kB]
Get:7 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 ieee-data all 20180204.1 [1539 kB]
Get:8 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 python-netaddr all 0.7.19-1 [213 kB]
Get:9 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/universe amd64 ansible all 2.5.1+dfsg-1ubuntu0.1 [3198 kB]
Get:10 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 python-certifi all 2018.1.18-2 [144 kB]
Get:11 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 python-chardet all 3.0.4-1 [80.3 kB]
Get:12 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 python-jmespath all 0.9.3-1ubuntu1 [21.2 kB]
Get:13 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/universe amd64 python-kerberos amd64 1.1.14-1 [22.5 kB]
Get:14 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python-urllib3 all 1.22-1ubuntu0.18.04.1 [85.9 kB]
Get:15 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python-requests all 2.18.4-2ubuntu0.1 [58.5 kB]
Get:16 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 python-lockfile all 1:0.12.2-2 [14.6 kB]
Get:17 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/universe amd64 python-simplejson amd64 3.13.2-1 [61.2 kB]
Get:18 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/universe amd64 python-libcloud all 2.2.1-1 [1235 kB]
Get:19 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 python-openssl all 17.5.0-1ubuntu1 [41.3 kB]
Get:20 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/universe amd64 python-selinux amd64 2.7-2build2 [138 kB]
Get:21 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/universe amd64 python-xmltodict all 0.11.0-1 [10.3 kB]
Fetched 7278 kB in 0s (27.8 MB/s)
Selecting previously unselected package python-markupsafe.
(Reading database ... 63798 files and directories currently installed.)
Preparing to unpack .../00-python-markupsafe_1.0-1build1_amd64.deb ...
Unpacking python-markupsafe (1.0-1build1) ...
Selecting previously unselected package python-jinja2.
Preparing to unpack .../01-python-jinja2_2.10-1ubuntu0.18.04.1_all.deb ...
Unpacking python-jinja2 (2.10-1ubuntu0.18.04.1) ...
Selecting previously unselected package python-pyasn1.
Preparing to unpack .../02-python-pyasn1_0.4.2-3_all.deb ...
Unpacking python-pyasn1 (0.4.2-3) ...
Selecting previously unselected package python-paramiko.
Preparing to unpack .../03-python-paramiko_2.0.0-1ubuntu1.2_all.deb ...
Unpacking python-paramiko (2.0.0-1ubuntu1.2) ...
Selecting previously unselected package python-yaml.
```

Install Nginx Server and Configure through Https and lets encypt certificate tsl / ssl

```
ubuntu@ip-10-0-1-57:~$ ansible --version
ansible 2.5.1
  config file = /etc/ansible/ansible.cfg
  configured module search path = [u'/home/ubuntu/.ansible/plugins/modules', u'/usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python2.7/dist-packages/ansible
  executable location = /usr/bin/ansible
  python version = 2.7.17 (default, Nov  7 2019, 10:07:09) [GCC 7.4.0]
ubuntu@ip-10-0-1-57:~$ sudo vi /etc/ansible/hosts
ubuntu@ip-10-0-1-57:~$ vim sources.list
ubuntu@ip-10-0-1-57:~$ sudo apt-get update
Hit:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic InRelease
Hit:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu bionic-security InRelease
Reading package lists... Done
ubuntu@ip-10-0-1-57:~$ sudo apt-get install nginx
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  fontconfig-config fonts-dejavu-core libfontconfig1 libgd3 libjbig0
  libjpeg-turbo8 libjpeg8 libnginx-mod-http-geoip
  libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter
  libnginx-mod-mail libnginx-mod-stream libtiff5 libwebp6 libxpm4 nginx-common
  nginx-core
Suggested packages:
  libgd-tools fcgiwrap nginx-doc ssl-cert
The following NEW packages will be installed:
  fontconfig-config fonts-dejavu-core libfontconfig1 libgd3 libjbig0
  libjpeg-turbo8 libjpeg8 libnginx-mod-http-geoip
  libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter
  libnginx-mod-mail libnginx-mod-stream libtiff5 libwebp6 libxpm4 nginx
  nginx-common nginx-core
0 upgraded, 18 newly installed, 0 to remove and 71 not upgraded.
Need to get 2461 kB of archives.
After this operation, 8210 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libjpeg-turbo8 amd64 1.5.2-0ubuntu5.18.04.3 [110 kB]
Get:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 fonts-dejavu-core all 2.37-1 [1041 kB]
Get:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 fontconfig-config all 2.12.6-0ubuntu2 [55.8 kB]
Get:4 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libfontconfig1 amd64 2.12.6-0ubuntu2 [137 kB]
Get:5 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libjpeg8 amd64 8c-2ubuntu8 [2194 B]
Get:6 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libjbig0 amd64 2.1-3.1build1 [26.7 kB]
Get:7 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libtiff5 amd64 4.0.9-5ubuntu0.3 [153 kB]
Get:8 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libwebp6 amd64 0.6.1-2 [185 kB]
Get:9 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libxpm4 amd64 1:3.5.12-1 [34.0 kB]
Get:10 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libgd3 amd64 2.2.5-4ubuntu0.3 [119 kB]
Get:11 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 nginx-common all 1.14.0-0ubuntu1.6 [37.3 kB]
Get:12 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libnginx-mod-http-geoip amd64 1.14.0-0ubuntu1.6 [11.2 kB]
Get:13 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libnginx-mod-http-image-filter amd64 1.14.0-0ubuntu1.6 [14.5 kB]
Get:14 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libnginx-mod-http-xslt-filter amd64 1.14.0-0ubuntu1.6 [12.9 kB]
Get:15 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libnginx-mod-mail amd64 1.14.0-0ubuntu1.6 [41.7 kB]
Get:16 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libnginx-mod-stream amd64 1.14.0-0ubuntu1.6 [63.6 kB]
Get:17 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 nginx-core amd64 1.14.0-0ubuntu1.6 [413 kB]
Get:18 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 nginx all 1.14.0-0ubuntu1.6 [3596 B]
Fetched 2461 kB in 0s (36.0 MB/s)
Preconfiguring packages ...
Selecting previously unselected package libjpeg-turbo8:amd64.
(Reading database ... 69625 files and directories currently installed.)
Preparing to unpack .../00-libjpeg-turbo8_1.5.2-0ubuntu5.18.04.3_amd64.deb ...
Unpacking libjpeg-turbo8:amd64 (1.5.2-0ubuntu5.18.04.3) ...
Selecting previously unselected package fonts-dejavu-core.
```

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⚏ Apps M Gmail ▶ YouTube 🗺 Maps

Welcome to nginx!

If you see this page, the nginx web server is successfully installed and
working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

Install Nginx Server and Configure through Https and lets encypt certificate tsl / ssl

Sudo git clone https:/github.com/letsencrypt/letsencrypt/opt/lets

Sudo service nginx stop
cd/opt/letsencypt
./letsencypt-auto certainly —standalone

At prompt write email address

Then agree to certificate license

Then enter the domain name

It will show certificate

Configure nginx
Sudo ls/etc/letsencrypt/live /website name:
cert.pem chain.pem fullchain.pem privkey.pem

Server {
   Listen 80;
   server_name domain name.com website name www.xxx.com;
   Return 301 https://$host$request_uri;
}

For https configuration

Sudo vim /etc/nginx/sites-available/default

Find the server block and disable port 80
{
Listen 443 ssl;
server_name domain naim and web site

ssl/certificate etc/letsencrypt/live/domain name/fullchain.pem
ssl/certificate etc/letsencrypt/live/domain name/privkey.pem

Save and exit

Sudo service nginx restart

Visit the website and lock icon it will configure the certificate.