Foundations of Computer Security: Milestone 1 Report

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- **Logging into VM using ssh**

  ssh iiitd@192.168.2.224

- **Installing NGINX**

  sudo apt install nginx

- **Copying react build files to nginx server root**

  while at the root of the react project folder, run
  scp -r ./build/* iiitd@192.168.2.244:/var/www/html

  This copies all the build files to the root of our nginx server

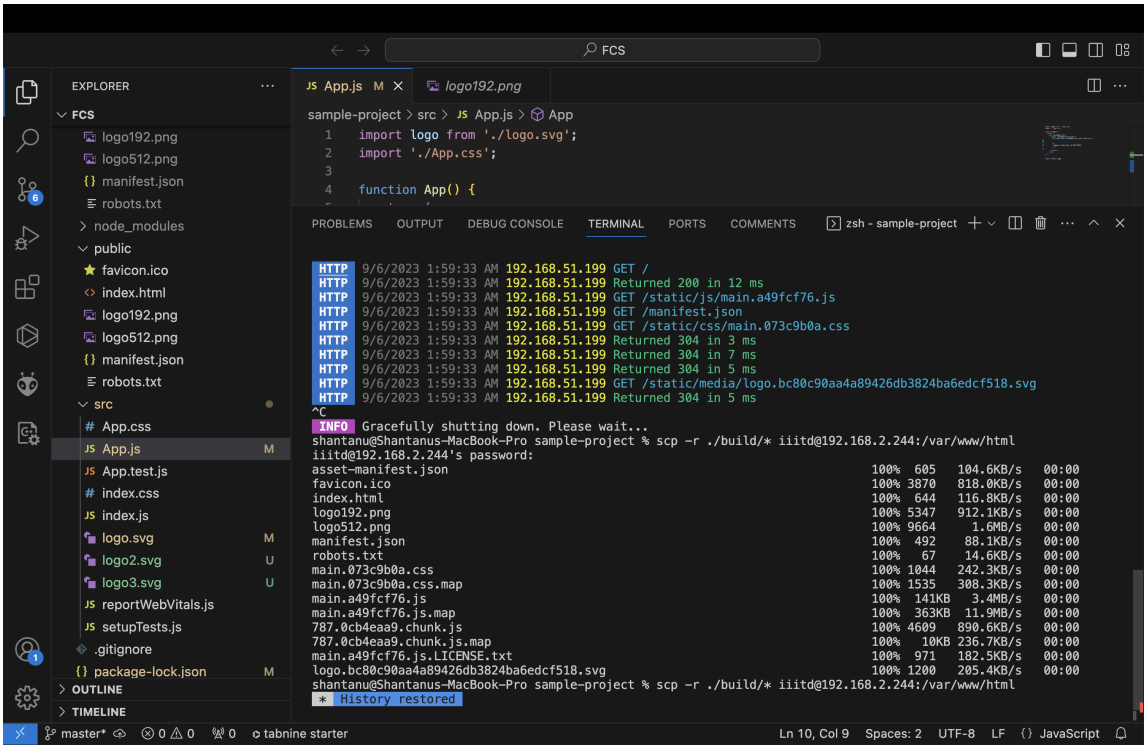

Figure 1: Copy Files to Server root

- **Creating self signed ssl certificates**
  - **creating an openssl certificate**

    sudo openssl req -x509 -nodes -days 365 -newkey rsa:2048 -keyout /etc/ssl/private/nginx-selfsigned.key -out /etc/ssl/certs/nginx-selfsigned.crt

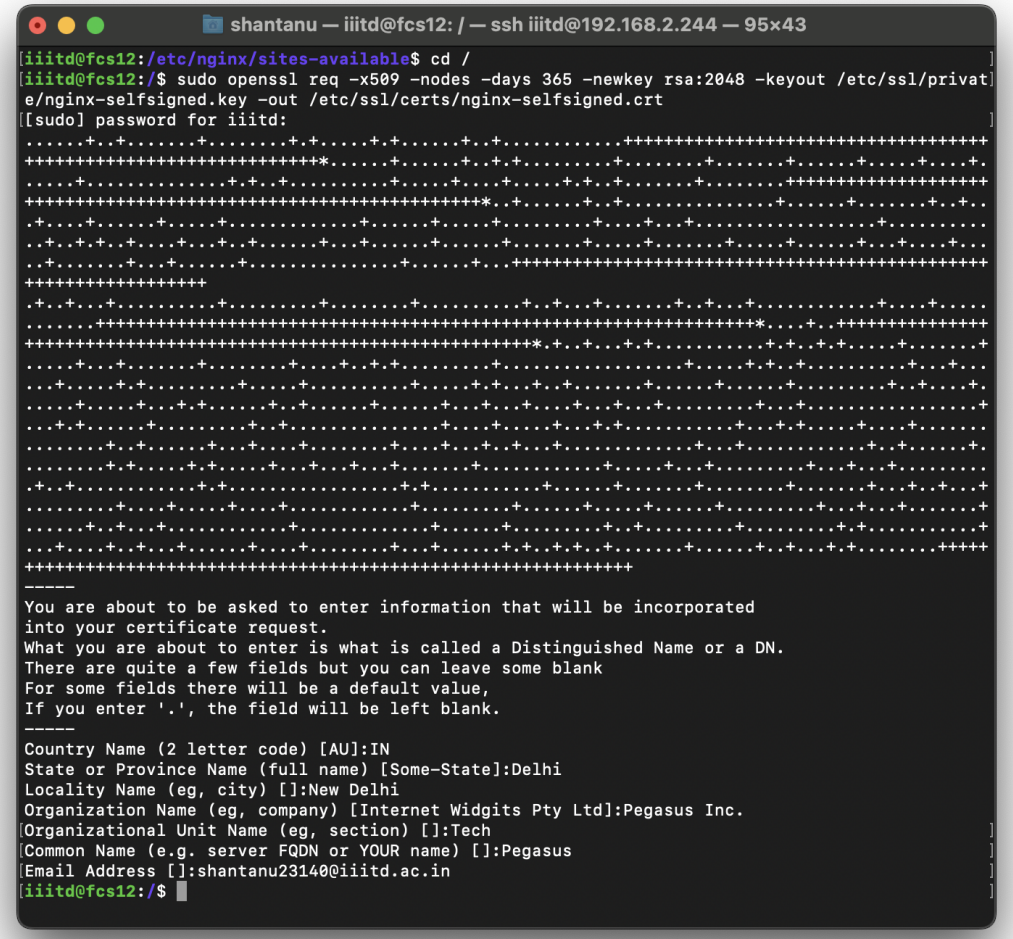

Figure 2: Creating OpenSSL certificate

– **Creating an nginx configuration snippet to point to the ssl certificate**

sudo nano /etc/nginx/snippets/self-signed.conf

This contains the paths to the ssl certificate and the ssl certificate key

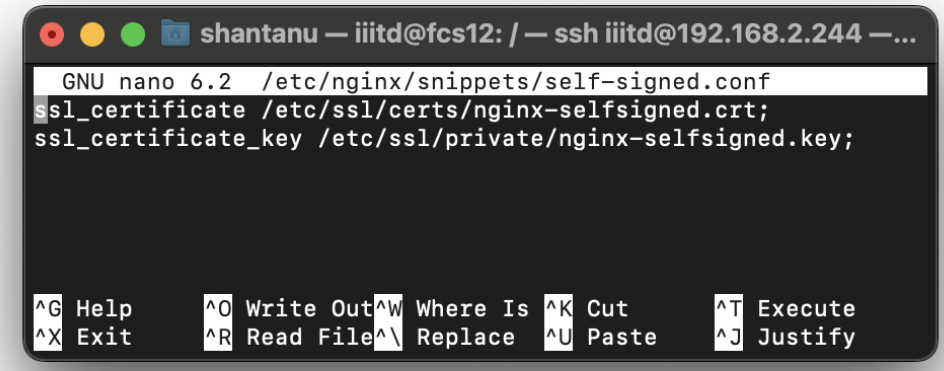

Figure 3: NGINX configuration snippet

– **Adding ssl to our nginx configuration**

sudo nano /etc/nginx/sites-available/default

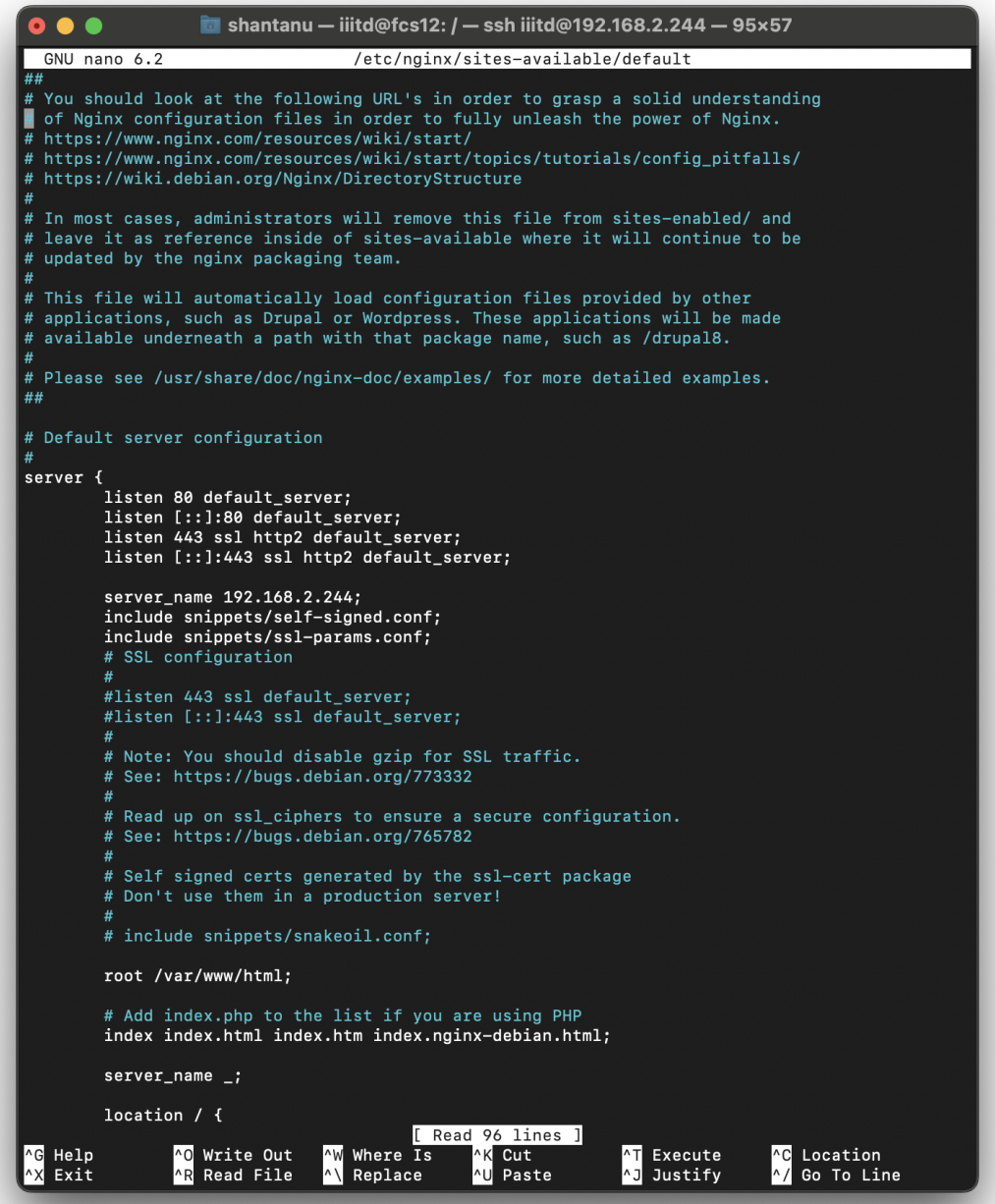

Figure 4: NGINX SSL configuration

– **Setting the changes in nginx**

sudo nginx -t

sudo systemctl restart nginx

This part has been referred from:
(https://www.digitalocean.com/community/tutorials/how-to-create-a-self-signed-ssl-certificate-for-nginx-in-ubuntu-16-04)

- **Final deployment**

To access the website, visit `https://192.168.2.244/` while being connected to the IIITD network.

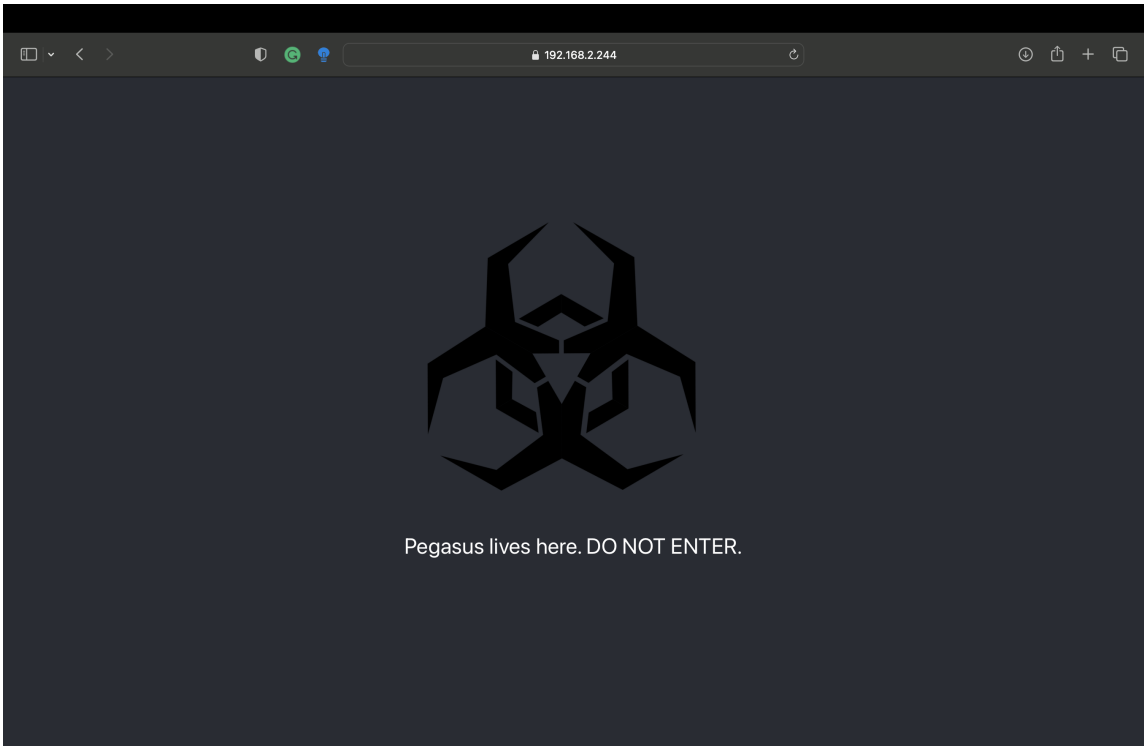

Figure 5: Pegasus Home