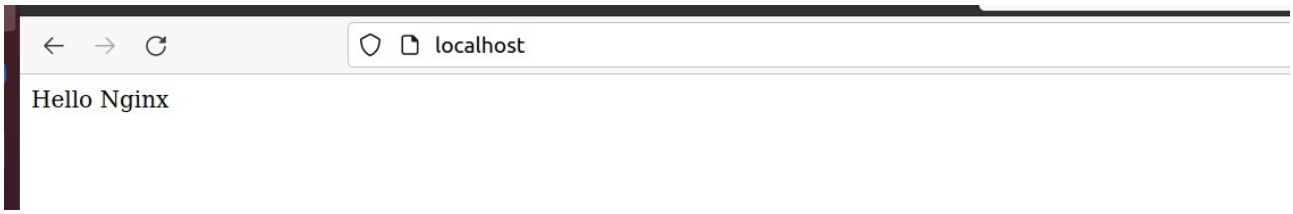
Q1.
sudo apt-get install nginx -y
cd //var//www//html//
vim index.html

```
<html>

<body>

    <p>Hello Nginx</p>

</body>




</html>
```

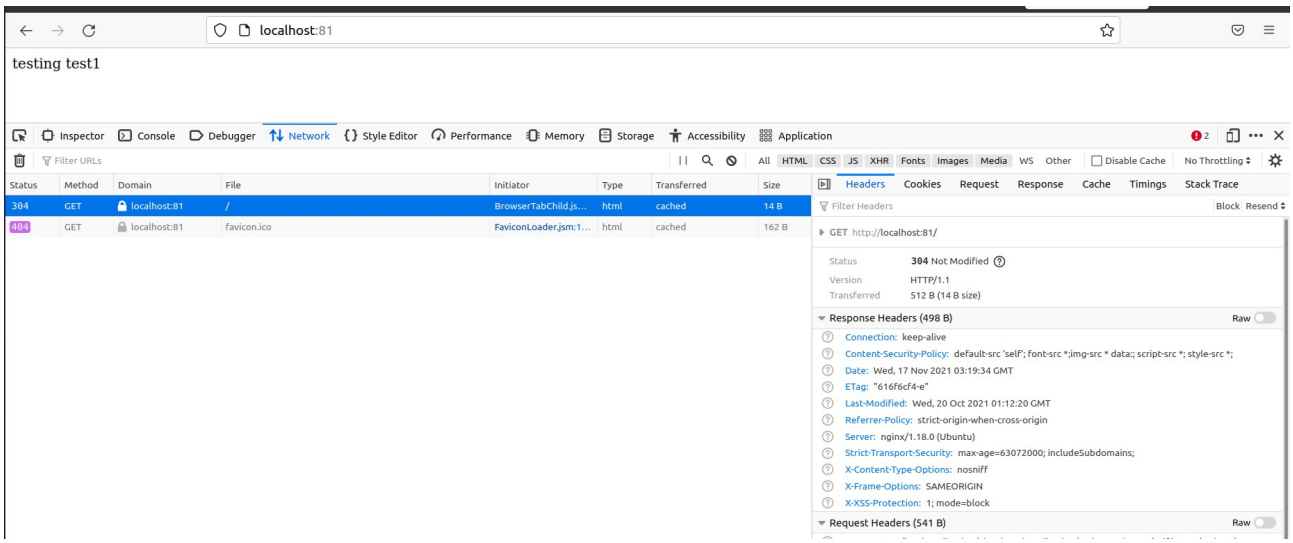
sudo systemctl start nginx
sudo systemctl enable nginx



Q2..
Security headers are directives used by web applications to configure security defenses in web browsers. Based on these directives, browsers can make it harder to exploit client-side vulnerabilities such as Cross-Site Scripting or Clickjacking. Headers can also be used to configure the browser to only allow valid TLS communication and enforce valid certificates, or even enforce using a specific server certificate.

They are directives to increase the protection and create more defense against vulnerabilities using browsers. For example, they modify the behavior of web browsers to avoid security vulnerabilities just to accept one kind of valid server certificate like TLS.

```
mkdir -p /var/www/test1.com/public_html
vim index.html
        testing test1

cd //etc//nginx//sites-available//
 mv default default-bk
cd ../sites-enabled
rm default

cd //etc//nginx//conf.d//
touch test.conf
        server {
        listen 81;
        listen [::]:81;
        root /var/www/test1.com/public_html;
        index index.html;
        server_name test1.com www.test1.com;
        add_header Strict-Transport-Security "max-age=63072000; includeSubdomains;" always;
        add_header X-Frame-Options "SAMEORIGIN" always;
        add_header X-XSS-Protection "1; mode=block" always;
        add_header X-Content-Type-Options "nosniff" always;
        add_header Content-Security-Policy "default-src 'self'; font-src *;img-src * data:; script-src
        *; style-src *;" always;
        add_header Referrer-Policy "strict-origin-when-cross-origin" always;

        location /test1.com {
         try_files $uri $uri/ =404;
        }
        }

nginx -t
systemctl restart nginx
```

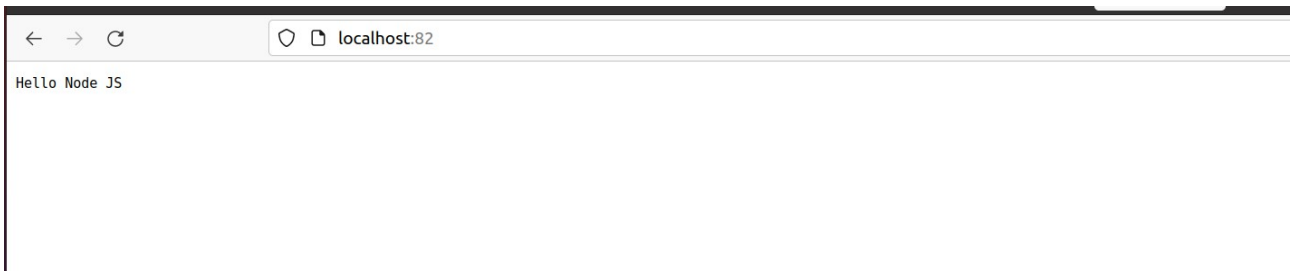


Q3.

cd //*etc*//nginx//conf.d//
touch test2.conf
vim test2.conf

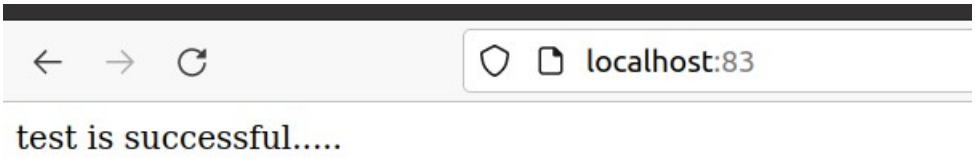
```
server {
   listen 82;
location / {
        proxy_pass http://localhost:6080;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection 'upgrade';
        proxy_set_header Host $host;
        proxy_cache_bypass $http_upgrade;
        proxy_http_version  1.1;
        proxy_set_header X-Real-IP   $remote_addr;
        }
}
```

nginx -t
systemctl restart nginx



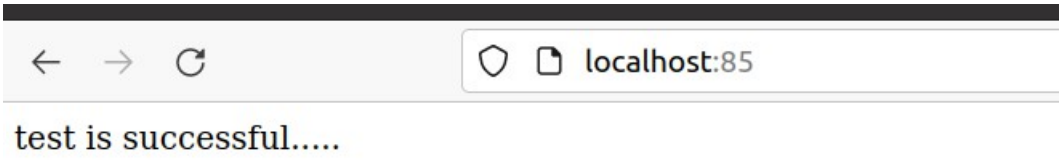
Q4.

```
cd //var/www//test1.com//public_html//
mkdir -p test2.com/html/
cd test2.com/html/
touch index.html
vim index.html
pwd
cd /etc/nginx/conf.d/
 ls
cp test.conf test3.conf
vim test3.conf
server {
        listen 83;
        listen [::]:83;
        root /var/www/test1.com/public_html/test2.com/html;
        index index.html;
        location /{
         try_files $uri $uri/ =404;
        }
}

nginx -t
systemctl restart nginx
```



Q5.

```
cd //etc//nginx//conf.d//
touch rev-p.conf
 ls
cat test2.conf
cp test2.conf rev-p.conf
vim rev-p.conf

server {
          listen 85;
          location / {
          proxy_pass http://localhost:83;
          proxy_set_header Upgrade $http_upgrade;
          proxy_set_header Connection 'upgrade';
          proxy_set_header Host $host;
          proxy_cache_bypass $http_upgrade;
          proxy_http_version  1.1;
          proxy_set_header X-Real-IP   $remote_addr;
          }
}


nginx -t
systemctl restart nginx
```



Q6.

```
sudo apt install php-fpm
cat test.conf
vim test.conf

        server {
        listen 81;
        listen [::]:81;
        root /var/www/test1.com/public_html;
        index index.html index.php;
        server_name test1.com www.test1.com;
        add_header Strict-Transport-Security "max-age=63072000; includeSubdomains;" always;
        add_header X-Frame-Options "SAMEORIGIN" always;
        add_header X-XSS-Protection "1; mode=block" always;
        add_header X-Content-Type-Options "nosniff" always;
        add_header Content-Security-Policy "default-src 'self'; font-src *;img-src * data:; script-src
        *; style-src *;" always;
        add_header Referrer-Policy "strict-origin-when-cross-origin" always;

        location /test1.com{
         try_files $uri $uri/ =404;
        }

        location ~ \.php$ {
      include snippets/fastcgi-php.conf;
      fastcgi_pass unix:/var/run/php/php7.4-fpm.sock;
    }

        location ~ /\.ht {
      deny all;
        }

}

cd /var/www/test1.com/public_html/
ls
vim info.php
        <?php
        phpinfo();
        ?>
```

systemctl restart nginx