Государственное автономное образовательное

учреждение высшего образования «Московский городской

педагогический университет»

Институт цифрового образования

Департамент информатизации образования

Лабораторная работа № 1

« Протокол HTTP/HTTPS»
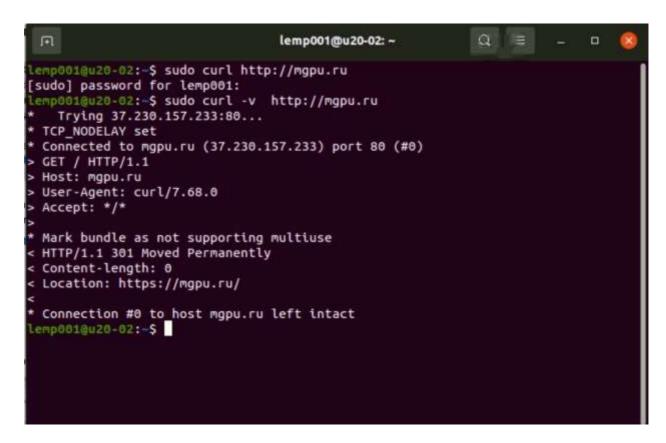

Дисциплина: Распределенные системы

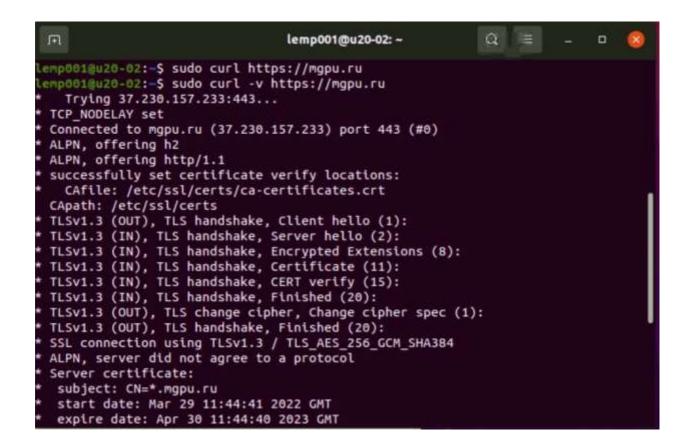Выполнила: студентка группы ТП-191

Вильчевская А.С.

Проверил:

Босенко Т.М.

2022 г

```
lemp001@u20-02:~$ sudo telnet -d localhost 22
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
SSH-2.0-OpenSSH_8.2p1 Ubuntu-4ubuntu0.5

Invalid SSH identification string.
Connection closed by foreign host.
lemp001@u20-02:~$ sudo telnet opennet.ru 80
Trying 217.65.3.21...
Connected to opennet.ru.
Escape character is '^]'.


^CConnection closed by foreign host.
lemp001@u20-02:~$ sudo telnet india.colorado.edu 13
Trying 128.138.140.44...
Connected to india.colorado.edu.
Escape character is '^]'.

59835 22-09-13 07:56:37 50 0 0 656.1 UTC(NIST) *
Connection closed by foreign host.
lemp001@u20-02:~$
```



```
lemp001@u20-02:~$ sudo curl http://mgpu.ru
[sudo] password for lemp001:
lemp001@u20-02:~$ sudo curl -v  http://mgpu.ru
*   Trying 37.230.157.233:80...
* TCP_NODELAY set
* Connected to mgpu.ru (37.230.157.233) port 80 (#0)
> GET / HTTP/1.1
> Host: mgpu.ru
> User-Agent: curl/7.68.0
> Accept: */*
>
* Mark bundle as not supporting multiuse
< HTTP/1.1 301 Moved Permanently
< Content-length: 0
< Location: https://mgpu.ru/
<
* Connection #0 to host mgpu.ru left intact
lemp001@u20-02:~$
```

```
SSH-2.0-OpenSSH_8.2p1 Ubuntu-4ubuntu0.5

Invalid SSH identification string.
Connection closed by foreign host.
lemp001@u20-02:~$ sudo telnet opennet.ru 80
Trying 217.65.3.21...
Connected to opennet.ru.
Escape character is '^]'.


^CConnection closed by foreign host.
lemp001@u20-02:~$ sudo telnet india.colorado.edu 13
Trying 128.138.140.44...
Connected to india.colorado.edu.
Escape character is '^]'.

59835 22-09-13 07:56:37 50 0 0 656.1 UTC(NIST) *
Connection closed by foreign host.
lemp001@u20-02:~$ sudo telnet -d mgpu.ru 80
Trying 37.230.157.233...
Connected to mgpu.ru.
Escape character is '^]'.
```



```
lemp001@u20-02:~$ sudo curl https://mgpu.ru
lemp001@u20-02:~$ sudo curl -v https://mgpu.ru
*   Trying 37.230.157.233:443...
* TCP_NODELAY set
* Connected to mgpu.ru (37.230.157.233) port 443 (#0)
* ALPN, offering h2
* ALPN, offering http/1.1
* successfully set certificate verify locations:
*   CAfile: /etc/ssl/certs/ca-certificates.crt
  CApath: /etc/ssl/certs
* TLSv1.3 (OUT), TLS handshake, Client hello (1):
* TLSv1.3 (IN), TLS handshake, Server hello (2):
* TLSv1.3 (IN), TLS handshake, Encrypted Extensions (8):
* TLSv1.3 (IN), TLS handshake, Certificate (11):
* TLSv1.3 (IN), TLS handshake, CERT verify (15):
* TLSv1.3 (IN), TLS handshake, Finished (20):
* TLSv1.3 (OUT), TLS change cipher, Change cipher spec (1):
* TLSv1.3 (OUT), TLS handshake, Finished (20):
* SSL connection using TLSv1.3 / TLS_AES_256_GCM_SHA384
* ALPN, server did not agree to a protocol
* Server certificate:
*  subject: CN=*.mgpu.ru
*  start date: Mar 29 11:44:41 2022 GMT
*  expire date: Apr 30 11:44:40 2023 GMT
```

```
lemp001@u20-02:~$ sudo curl -v https://www.mgpu.ru
*   Trying 37.230.157.233:443...
* TCP_NODELAY set
* Connected to www.mgpu.ru (37.230.157.233) port 443 (#0)
* ALPN, offering h2
* ALPN, offering http/1.1
* successfully set certificate verify locations:
*   CAfile: /etc/ssl/certs/ca-certificates.crt
  CApath: /etc/ssl/certs
* TLSv1.3 (OUT), TLS handshake, Client hello (1):
* TLSv1.3 (IN), TLS handshake, Server hello (2):
* TLSv1.3 (IN), TLS handshake, Encrypted Extensions (8):
* TLSv1.3 (IN), TLS handshake, Certificate (11):
* TLSv1.3 (IN), TLS handshake, CERT verify (15):
* TLSv1.3 (IN), TLS handshake, Finished (20):
* TLSv1.3 (OUT), TLS change cipher, Change cipher spec (1):
* TLSv1.3 (OUT), TLS handshake, Finished (20):
* SSL connection using TLSv1.3 / TLS_AES_256_GCM_SHA384
* ALPN, server did not agree to a protocol
* Server certificate:
*  subject: CN=*.mgpu.ru
*  start date: Mar 29 11:44:41 2022 GMT
*  expire date: Apr 30 11:44:40 2023 GMT
```

```
ga('send', 'pageview');</script>

<!-- Yandex.Metrika counter -->
<script type="text/javascript" >
   (function(m,e,t,r,i,k,a){m[i]=m[i]||function(){(m[i].a=m[i].a||[]).push(argu
ments)};
   m[i].l=1*new Date();k=e.createElement(t),a=e.getElementsByTagName(t)[0],k.as
ync=1,k.src=r,a.parentNode.insertBefore(k,a)})
   (window, document, "script", "https://mc.yandex.ru/metrika/tag.js", "ym");

   ym(10464136, "init", {
        clickmap:true,
        trackLinks:true,
        accurateTrackBounce:true,
        webvisor:true
   });
</script>
<noscript><div><img src="https://mc.yandex.ru/watch/10464136" style="position:a
bsolute; left:-9999px;" alt="" /></div></noscript>
<!-- /Yandex.Metrika counter -->
</body>
* Connection #0 to host www.mgpu.ru left intact
lemp001@u20-02:~$
```

```
  CApath: /etc/ssl/certs
* TLSv1.3 (OUT), TLS handshake, Client hello (1):
* TLSv1.3 (IN), TLS handshake, Server hello (2):
* TLSv1.3 (IN), TLS handshake, Encrypted Extensions (8):
* TLSv1.3 (IN), TLS handshake, Certificate (11):
* TLSv1.3 (IN), TLS handshake, CERT verify (15):
* TLSv1.3 (IN), TLS handshake, Finished (20):
* TLSv1.3 (OUT), TLS change cipher, Change cipher spec (1):
* TLSv1.3 (OUT), TLS handshake, Finished (20):
* SSL connection using TLSv1.3 / TLS_AES_256_GCM_SHA384
* ALPN, server did not agree to a protocol
* Server certificate:
*  subject: CN=*.mgpu.ru
*  start date: Mar 29 11:44:41 2022 GMT
*  expire date: Apr 30 11:44:40 2023 GMT
*  subjectAltName: host "www.mgpu.ru" matched cert's "*.mgpu.ru"
*  issuer: C=BE; O=GlobalSign nv-sa; CN=AlphaSSL CA - SHA256 - G2
*  SSL certificate verify ok.
> GET / HTTP/1.1
> Host: www.mgpu.ru
> User-Agent: curl/7.68.0
> Accept: */*
>
```

```
lemp001@u20-02:~$ sudo curl -v http://www.hse.ru
[sudo] password for lemp001:
*   Trying 178.248.234.104:80...
* TCP_NODELAY set
* Connected to www.hse.ru (178.248.234.104) port 80 (#0)
> GET / HTTP/1.1
> Host: www.hse.ru
> User-Agent: curl/7.68.0
> Accept: */*
>
* Mark bundle as not supporting multiuse
< HTTP/1.1 301 Moved Permanently
< Server: QRATOR
< Date: Tue, 13 Sep 2022 08:14:16 GMT
< Content-Type: text/html
< Content-Length: 162
< Connection: keep-alive
< Keep-Alive: timeout=15
< Location: https://www.hse.ru/
< Strict-Transport-Security: max-age=15552000
< X-XSS-Protection: 1; mode=block; report=https://www.hse.ru/n/api/xss/report
<
<html>
```
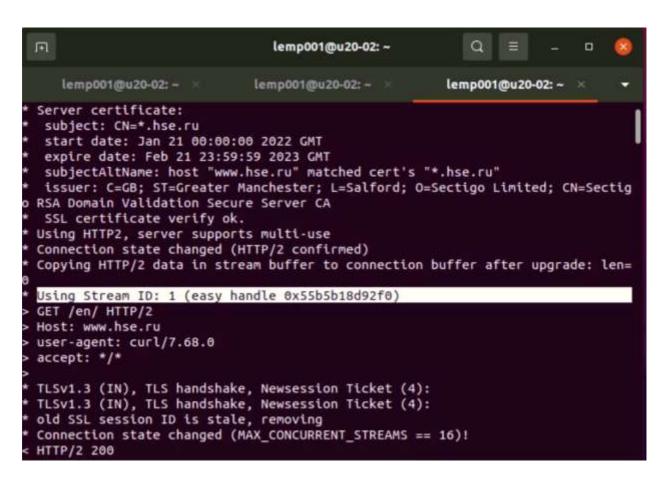
```
                    lemp001@u20-02: ~          Q  ☰  —  □  ⊗

lemp001@u20-02:~$ sudo curl -v http://www.hse.ru
[sudo] password for lemp001:
*    Trying 178.248.234.104:80...
* TCP_NODELAY set
* Connected to www.hse.ru (178.248.234.104) port 80 (#0)
> GET / HTTP/1.1
> Host: www.hse.ru
> User-Agent: curl/7.68.0
> Accept: */*
>
* Mark bundle as not supporting multiuse
< HTTP/1.1 301 Moved Permanently
< Server: QRATOR
< Date: Tue, 13 Sep 2022 08:14:16 GMT
< Content-Type: text/html
< Content-Length: 162
< Connection: keep-alive
< Keep-Alive: timeout=15
< Location: https://www.hse.ru/
< Strict-Transport-Security: max-age=15552000
< X-XSS-Protection: 1; mode=block; report=https://www.hse.ru/n/api/xss/report
<
<html>
```



```
                    lemp001@u20-02: ~          Q  ☰  —  □  ⊗

     lemp001@u20-02: ~        ×       lemp001@u20-02: ~       ×    ▼

lemp001@u20-02:~$ sudo curl -v https://www.hse.ru/
[sudo] password for lemp001:
*    Trying 178.248.234.104:443...
* TCP_NODELAY set
* Connected to www.hse.ru (178.248.234.104) port 443 (#0)
* ALPN, offering h2
* ALPN, offering http/1.1
* successfully set certificate verify locations:
*   CAfile: /etc/ssl/certs/ca-certificates.crt
  CApath: /etc/ssl/certs
* TLSv1.3 (OUT), TLS handshake, Client hello (1):
* TLSv1.3 (IN), TLS handshake, Server hello (2):
* TLSv1.3 (IN), TLS handshake, Encrypted Extensions (8):
* TLSv1.3 (IN), TLS handshake, Certificate (11):
* TLSv1.3 (IN), TLS handshake, CERT verify (15):
* TLSv1.3 (IN), TLS handshake, Finished (20):
* TLSv1.3 (OUT), TLS change cipher, Change cipher spec (1):
* TLSv1.3 (OUT), TLS handshake, Finished (20):
* SSL connection using TLSv1.3 / TLS_AES_128_GCM_SHA256
* ALPN, server accepted to use h2
* Server certificate:
*  subject: CN=*.hse.ru
*  start date: Jan 21 00:00:00 2022 GMT
```
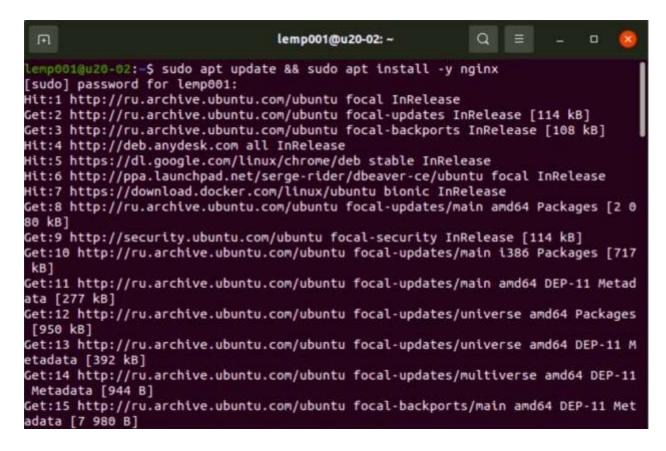
```
Using Stream ID: 1 (easy handle 0x55e5487b32f0)
> GET / HTTP/2
> Host: www.hse.ru
> user-agent: curl/7.68.0
> accept: */*
>
* TLSv1.3 (IN), TLS handshake, Newsession Ticket (4):
* TLSv1.3 (IN), TLS handshake, Newsession Ticket (4):
* old SSL session ID is stale, removing
* Connection state changed (MAX_CONCURRENT_STREAMS == 16)!
< HTTP/2 302
< server: QRATOR
< date: Tue, 13 Sep 2022 08:16:02 GMT
< content-type: text/html
< content-length: 138
< location: https://www.hse.ru/en/
< expires: Tue, 13 Sep 2022 08:16:02 GMT
< cache-control: max-age=0
< strict-transport-security: max-age=15552000
< x-xss-protection: 1; mode=block; report=https://www.hse.ru/n/api/xss/report
< set-cookie: tracking=ZEsUBGMgPEJL38EyCWE/Ag==; expires=Thu, 31-Dec-37 23:55:5
5 GMT; domain=.hse.ru; path=/
<
```



```
lemp001@u20-02:~$ sudo  curl -v https://www.hse.ru/en/
[sudo] password for lemp001:
*    Trying 178.248.234.104:443...
* TCP_NODELAY set
* Connected to www.hse.ru (178.248.234.104) port 443 (#0)
* ALPN, offering h2
* ALPN, offering http/1.1
* successfully set certificate verify locations:
*    CAfile: /etc/ssl/certs/ca-certificates.crt
  CApath: /etc/ssl/certs
* TLSv1.3 (OUT), TLS handshake, Client hello (1):
* TLSv1.3 (IN), TLS handshake, Server hello (2):
* TLSv1.3 (IN), TLS handshake, Encrypted Extensions (8):
* TLSv1.3 (IN), TLS handshake, Certificate (11):
* TLSv1.3 (IN), TLS handshake, CERT verify (15):
* TLSv1.3 (IN), TLS handshake, Finished (20):
* TLSv1.3 (OUT), TLS change cipher, Change cipher spec (1):
* TLSv1.3 (OUT), TLS handshake, Finished (20):
* SSL connection using TLSv1.3 / TLS_AES_128_GCM_SHA256
* ALPN, server accepted to use h2
* Server certificate:
*  subject: CN=*.hse.ru
*  start date: Jan 21 00:00:00 2022 GMT
```
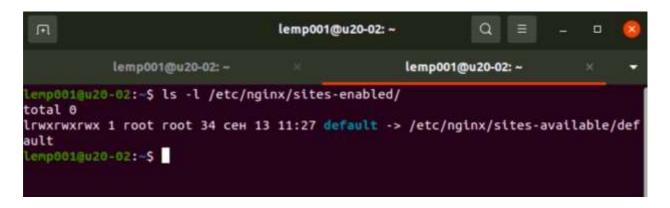
```
* Using HTTP2, server supports multi-use
* Connection state changed (HTTP/2 confirmed)
* Copying HTTP/2 data in stream buffer to connection buffer after upgrade: len=
0
* Using Stream ID: 1 (easy handle 0x55b5b18d92f0)
> GET /en/ HTTP/2
> Host: www.hse.ru
> user-agent: curl/7.68.0
> accept: */*
>
* TLSv1.3 (IN), TLS handshake, Newsession Ticket (4):
* TLSv1.3 (IN), TLS handshake, Newsession Ticket (4):
* old SSL session ID is stale, removing
* Connection state changed (MAX_CONCURRENT_STREAMS == 16)!
< HTTP/2 200
< server: QRATOR
< date: Tue, 13 Sep 2022 08:19:42 GMT
< content-type: text/html; charset=utf-8
< content-length: 100547
< etag: W/"188c3-TTRGgiSJ8Xq6BiuGAC4y1eeBTdc"
< x-ireland-cache-status: HIT
< strict-transport-security: max-age=15552000
< x-xss-protection: 1; mode=block; report=https://www.hse.ru/n/api/xss/report
```

```
* Server certificate:
*  subject: CN=*.hse.ru
*  start date: Jan 21 00:00:00 2022 GMT
*  expire date: Feb 21 23:59:59 2023 GMT
*  subjectAltName: host "www.hse.ru" matched cert's "*.hse.ru"
*  issuer: C=GB; ST=Greater Manchester; L=Salford; O=Sectigo Limited; CN=Sectig
o RSA Domain Validation Secure Server CA
*  SSL certificate verify ok.
* Using HTTP2, server supports multi-use
* Connection state changed (HTTP/2 confirmed)
* Copying HTTP/2 data in stream buffer to connection buffer after upgrade: len=
0
* Using Stream ID: 1 (easy handle 0x55b5b18d92f0)
> GET /en/ HTTP/2
> Host: www.hse.ru
> user-agent: curl/7.68.0
> accept: */*
>
* TLSv1.3 (IN), TLS handshake, Newsession Ticket (4):
* TLSv1.3 (IN), TLS handshake, Newsession Ticket (4):
* old SSL session ID is stale, removing
* Connection state changed (MAX_CONCURRENT_STREAMS == 16)!
< HTTP/2 200
```

```
* SSL connection using TLSv1.3 / TLS_AES_256_GCM_SHA384
* ALPN, server did not agree to a protocol
* Server certificate:
*  subject: CN=*.mgpu.ru
*  start date: Mar 29 11:44:41 2022 GMT
*  expire date: Apr 30 11:44:40 2023 GMT
*  subjectAltName: host "mgpu.ru" matched cert's "mgpu.ru"
*  issuer: C=BE; O=GlobalSign nv-sa; CN=AlphaSSL CA - SHA256 - G2
*  SSL certificate verify ok.
> GET / HTTP/1.1
> Host: mgpu.ru
> User-Agent: curl/7.68.0
> Accept: */*
>
* TLSv1.3 (IN), TLS handshake, Newsession Ticket (4):
* TLSv1.3 (IN), TLS handshake, Newsession Ticket (4):
* old SSL session ID is stale, removing
* Mark bundle as not supporting multiuse
< HTTP/1.1 301 Moved Permanently
< Content-length: 0
< Location: https://www.mgpu.ru/
<
* Connection #0 to host mgpu.ru left intact
lemp001@u20-02:~$
```



```
* Server certificate:
*  subject: CN=*.hse.ru
*  start date: Jan 21 00:00:00 2022 GMT
*  expire date: Feb 21 23:59:59 2023 GMT
*  subjectAltName: host "www.hse.ru" matched cert's "*.hse.ru"
*  issuer: C=GB; ST=Greater Manchester; L=Salford; O=Sectigo Limited; CN=Sectig
o RSA Domain Validation Secure Server CA
*  SSL certificate verify ok.
* Using HTTP2, server supports multi-use
* Connection state changed (HTTP/2 confirmed)
* Copying HTTP/2 data in stream buffer to connection buffer after upgrade: len=
0
* Using Stream ID: 1 (easy handle 0x55b5b18d92f0)
> GET /en/ HTTP/2
> Host: www.hse.ru
> user-agent: curl/7.68.0
> accept: */*
>
* TLSv1.3 (IN), TLS handshake, Newsession Ticket (4):
* TLSv1.3 (IN), TLS handshake, Newsession Ticket (4):
* old SSL session ID is stale, removing
* Connection state changed (MAX_CONCURRENT_STREAMS == 16)!
< HTTP/2 200
```

```
* expire date: Feb 21 23:59:59 2023 GMT
* subjectAltName: host "www.hse.ru" matched cert's "*.hse.ru"
* issuer: C=GB; ST=Greater Manchester; L=Salford; O=Sectigo Limited; CN=Sectig
o RSA Domain Validation Secure Server CA
* SSL certificate verify ok.
* Using HTTP2, server supports multi-use
* Connection state changed (HTTP/2 confirmed)
* Copying HTTP/2 data in stream buffer to connection buffer after upgrade: len=
0
* Using Stream ID: 1 (easy handle 0x55b5b18d92f0)
> GET /en/ HTTP/2
> Host: www.hse.ru
> user-agent: curl/7.68.0
> accept: */*
>
* TLSv1.3 (IN), TLS handshake, Newsession Ticket (4):
* TLSv1.3 (IN), TLS handshake, Newsession Ticket (4):
* old SSL session ID is stale, removing
* Connection state changed (MAX_CONCURRENT_STREAMS == 16)!
< HTTP/2 200
< server: QRATOR
< date: Tue, 13 Sep 2022 08:19:42 GMT
< content-type: text/html; charset=utf-8
```
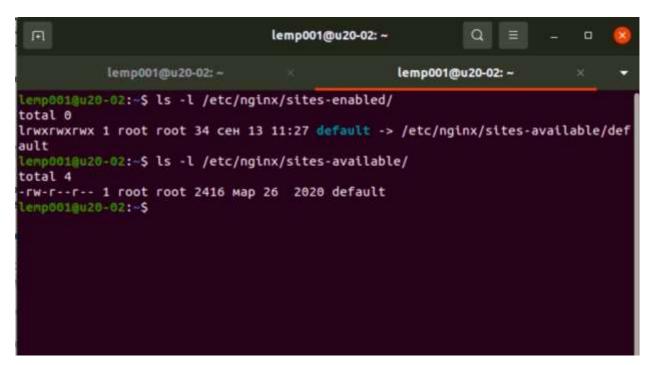
```
lemp001@u20-02:~$ sudo apt update && sudo apt install -y nginx
[sudo] password for lemp001:
Hit:1 http://ru.archive.ubuntu.com/ubuntu focal InRelease
Get:2 http://ru.archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Get:3 http://ru.archive.ubuntu.com/ubuntu focal-backports InRelease [108 kB]
Hit:4 http://deb.anydesk.com all InRelease
Hit:5 https://dl.google.com/linux/chrome/deb stable InRelease
Hit:6 http://ppa.launchpad.net/serge-rider/dbeaver-ce/ubuntu focal InRelease
Hit:7 https://download.docker.com/linux/ubuntu bionic InRelease
Get:8 http://ru.archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages [2 0
80 kB]
Get:9 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]
Get:10 http://ru.archive.ubuntu.com/ubuntu focal-updates/main i386 Packages [717
 kB]
Get:11 http://ru.archive.ubuntu.com/ubuntu focal-updates/main amd64 DEP-11 Metad
ata [277 kB]
Get:12 http://ru.archive.ubuntu.com/ubuntu focal-updates/universe amd64 Packages
 [950 kB]
Get:13 http://ru.archive.ubuntu.com/ubuntu focal-updates/universe amd64 DEP-11 M
etadata [392 kB]
Get:14 http://ru.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 DEP-11
 Metadata [944 B]
Get:15 http://ru.archive.ubuntu.com/ubuntu focal-backports/main amd64 DEP-11 Met
adata [7 980 B]
```

```
lemp001@u20-02:~$ ls -l /etc/nginx/sites-enabled/
total 0
lrwxrwxrwx 1 root root 34 сен 13 11:27 default -> /etc/nginx/sites-available/def
ault
lemp001@u20-02:~$
```



```
lemp001@u20-02:~$ ls -l /etc/nginx/sites-enabled/
total 0
lrwxrwxrwx 1 root root 34 сен 13 11:27 default -> /etc/nginx/sites-available/def
ault
lemp001@u20-02:~$ ls -l /etc/nginx/sites-available/
total 4
-rw-r--r-- 1 root root 2416 мар 26  2020 default
lemp001@u20-02:~$
```

```
lemp001@u20-02:~$ ls -l /etc/nginx/sites-enabled/
total 0
lrwxrwxrwx 1 root root 34 сен 13 11:27 default -> /etc/nginx/sites-available/def
ault
lemp001@u20-02:~$ ls -l /etc/nginx/sites-available/
total 4
-rw-r--r-- 1 root root 2416 мар 26  2020 default
lemp001@u20-02:~$ sudo rm /etc/nginx/sites-enabled/default
[sudo] password for lemp001:
lemp001@u20-02:~$ sudo mkdir -p /var/www/simple_static
lemp001@u20-02:~$ sudo chown lemp02 /var/www/simple_static
chown: invalid user: 'lemp02'
lemp001@u20-02:~$ sudo chown lemp001 /var/www/simple_static
lemp001@u20-02:~$
```



```
lemp001@u20-02:~$ ls -l /etc/nginx/sites-enabled/
total 0
lrwxrwxrwx 1 root root 34 сен 13 11:27 default -> /etc/nginx/sites-available/def
ault
lemp001@u20-02:~$ ls -l /etc/nginx/sites-available/
total 4
-rw-r--r-- 1 root root 2416 мар 26  2020 default
lemp001@u20-02:~$ sudo rm /etc/nginx/sites-enabled/default
[sudo] password for lemp001:
lemp001@u20-02:~$ sudo mkdir -p /var/www/simple_static
lemp001@u20-02:~$ sudo chown lemp02 /var/www/simple_static
chown: invalid user: 'lemp02'
lemp001@u20-02:~$ sudo chown lemp001 /var/www/simple_static
lemp001@u20-02:~$ cd /var/www/simple_static
lemp001@u20-02:/var/www/simple_static$
```

```
lemp001@u20-02:~$ ls -l /etc/nginx/sites-enabled/
total 0
lrwxrwxrwx 1 root root 34 сен 13 11:27 default -> /etc/nginx/sites-available/def
ault
lemp001@u20-02:~$ ls -l /etc/nginx/sites-available/
total 4
-rw-r--r-- 1 root root 2416 мар 26  2020 default
lemp001@u20-02:~$ sudo rm /etc/nginx/sites-enabled/default
[sudo] password for lemp001:
lemp001@u20-02:~$ sudo mkdir -p /var/www/simple_static
lemp001@u20-02:~$ sudo chown lemp02 /var/www/simple_static
chown: invalid user: 'lemp02'
lemp001@u20-02:~$ sudo chown lemp001 /var/www/simple_static
lemp001@u20-02:~$ cd /var/www/simple_static
lemp001@u20-02:/var/www/simple_static$
lemp001@u20-02:/var/www/simple_static$ curl https://www.google.com/images/brandi
ng/googlelogo/2x/googlelogo_color_272x92dp.png > google.png
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 13504  100 13504    0     0   178k      0 --:--:-- --:--:-- --:--:--  178k
lemp001@u20-02:/var/www/simple_static$
```
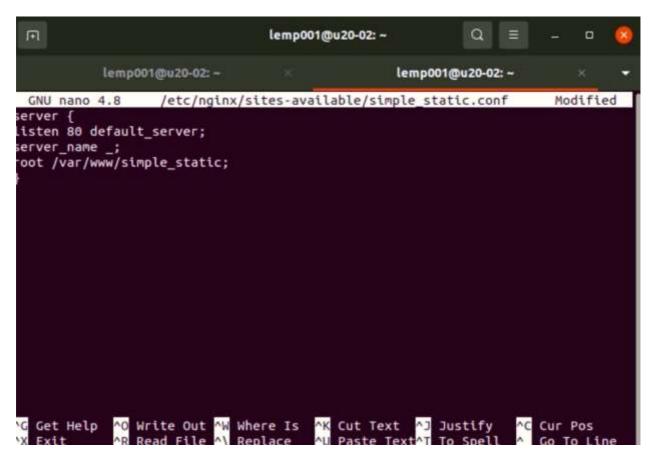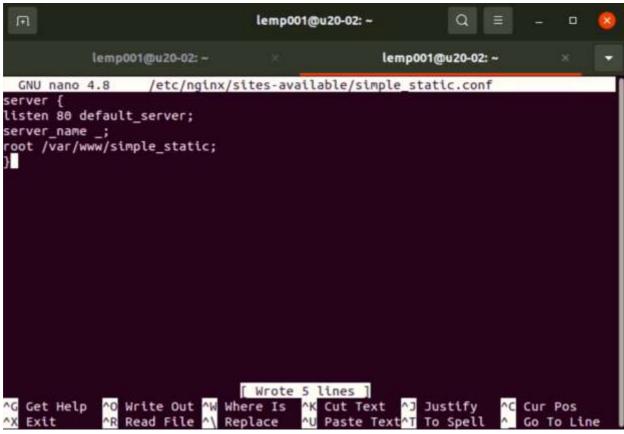
```
lemp001@u20-02:~$ ls -l /etc/nginx/sites-enabled/
total 0
lrwxrwxrwx 1 root root 34 сен 13 11:27 default -> /etc/nginx/sites-available/def
ault
lemp001@u20-02:~$ ls -l /etc/nginx/sites-available/
total 4
-rw-r--r-- 1 root root 2416 мар 26  2020 default
lemp001@u20-02:~$ sudo rm /etc/nginx/sites-enabled/default
[sudo] password for lemp001:
lemp001@u20-02:~$ sudo mkdir -p /var/www/simple_static
lemp001@u20-02:~$ sudo chown lemp02 /var/www/simple_static
chown: invalid user: 'lemp02'
lemp001@u20-02:~$ sudo chown lemp001 /var/www/simple_static
lemp001@u20-02:~$ cd /var/www/simple_static
lemp001@u20-02:/var/www/simple_static$
lemp001@u20-02:/var/www/simple_static$ curl https://www.google.com/images/brandi
ng/googlelogo/2x/googlelogo_color_272x92dp.png > google.png
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 13504  100 13504    0     0   178k      0 --:--:-- --:--:-- --:--:--  178k
lemp001@u20-02:/var/www/simple_static$ printf "<body>This is our first html file
</body>\n" > index.html
lemp001@u20-02:/var/www/simple_static$
```

```
lrwxrwxrwx 1 root root 34 сен 13 11:27 default -> /etc/nginx/sites-available/def
ault
lemp001@u20-02:~$ ls -l /etc/nginx/sites-available/
total 4
-rw-r--r-- 1 root root 2416 мар 26  2020 default
lemp001@u20-02:~$ sudo rm /etc/nginx/sites-enabled/default
[sudo] password for lemp001:
lemp001@u20-02:~$ sudo mkdir -p /var/www/simple_static
lemp001@u20-02:~$ sudo chown lemp02 /var/www/simple_static
chown: invalid user: 'lemp02'
lemp001@u20-02:~$ sudo chown lemp001 /var/www/simple_static
lemp001@u20-02:~$ cd /var/www/simple_static
lemp001@u20-02:/var/www/simple_static$
lemp001@u20-02:/var/www/simple_static$ curl https://www.google.com/images/brandi
ng/googlelogo/2x/googlelogo_color_272x92dp.png > google.png
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 13504  100 13504    0     0   178k      0 --:--:-- --:--:-- --:--:--  178k
lemp001@u20-02:/var/www/simple_static$ printf "<body>This is our first html file
</body>\n" > index.html
lemp001@u20-02:/var/www/simple_static$ ls
google.png  index.html
lemp001@u20-02:/var/www/simple_static$
```

```
  GNU nano 4.8       /etc/nginx/sites-available/simple_static.conf




















                              [ New File ]
^G Get Help   ^O Write Out ^W Where Is  ^K Cut Text  ^J Justify   ^C Cur Pos
^X Exit       ^R Read File ^\ Replace   ^U Paste Text^T To Spell  ^  Go To Line
```

```
server {
listen 80 default_server;
server_name _;
root /var/www/simple_static;
}
```

```
^G Get Help    ^O Write Out  ^W Where Is   ^K Cut Text   ^J Justify    ^C Cur Pos
^X Exit        ^R Read File  ^\ Replace    ^U Paste Text ^T To Spell   ^  Go To Line
```

```
server {
listen 80 default_server;
server_name _;
root /var/www/simple_static;
}
```

[Wrote 5 lines]

```
^G Get Help    ^O Write Out  ^W Where Is   ^K Cut Text   ^J Justify    ^C Cur Pos
^X Exit        ^R Read File  ^\ Replace    ^U Paste Text ^T To Spell   ^  Go To Line
```

```
lemp001@u20-02:/etc/nginx$ cd /var/www/simple_static
lemp001@u20-02:/var/www/simple_static$ ls
google.png   index.html
lemp001@u20-02:/var/www/simple_static$ cd
lemp001@u20-02:~$ sudo nano /etc/nginx/sites-available/simple_static.conf
[sudo] password for lemp001:
lemp001@u20-02:~$ cd /etc/nginx/
lemp001@u20-02:/etc/nginx$ sudo ln sites-available/simple_static.conf sites-enab
led/simple_static.conf
lemp001@u20-02:/etc/nginx$ udo nginx -t

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

sudo apt install udo

lemp001@u20-02:/etc/nginx$ sudo nginx -t
nginx: the configuration file /etc/nginx/nginx.conf syntax is ok
nginx: configuration file /etc/nginx/nginx.conf test is successful
lemp001@u20-02:/etc/nginx$
```

```
lemp001@u20-02:/etc/nginx$ curl -v http://localhost:80
*   Trying 127.0.0.1:80...
* TCP_NODELAY set
* Connected to localhost (127.0.0.1) port 80 (#0)
> GET / HTTP/1.1
> Host: localhost
> User-Agent: curl/7.68.0
> Accept: */*
>
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Server: nginx/1.18.0 (Ubuntu)
< Date: Mon, 19 Sep 2022 18:52:37 GMT
< Content-Type: text/html
< Content-Length: 41
< Last-Modified: Mon, 19 Sep 2022 18:40:12 GMT
< Connection: keep-alive
< ETag: "6328b78c-29"
< Accept-Ranges: bytes
<
<body>This is our first html file</body>
* Connection #0 to host localhost left intact
lemp001@u20-02:/etc/nginx$
```

lemp001@u20-02: /etc/nginx   lemp001@u20-02: /etc/nginx

```
lemp001@u20-02:/var/www/simple_static$ cd
lemp001@u20-02:~$ sudo nano /etc/nginx/sites-available/simple_static.conf
[sudo] password for lemp001:
lemp001@u20-02:~$ cd /etc/nginx/
lemp001@u20-02:/etc/nginx$ sudo ln sites-available/simple_static.conf sites-enab
led/simple_static.conf
lemp001@u20-02:/etc/nginx$ udo nginx -t

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lemp001@u20-02:/etc/nginx$ cd
lemp001@u20-02:~$ sudo nano /etc/nginx/sites-available/simple_static.conf
lemp001@u20-02:~$ cd /etc/nginx/
lemp001@u20-02:/etc/nginx$ sudo nginx -t
nginx: the configuration file /etc/nginx/nginx.conf syntax is ok
nginx: configuration file /etc/nginx/nginx.conf test is successful
lemp001@u20-02:/etc/nginx$ sudo service nginx start
lemp001@u20-02:/etc/nginx$
```