Lab report 6:

TASK 1

We want to prevent any user from accessing http://example.com and if someone access it, they should be redirected to https://example.com

We did that by changing the default configuration file of the webserver. We added the following lines to the default configuration file of the webserver.

sudo nano /etc/apache2/sites-available/example.com.conf

TASK 2

Now we want to implement authentication for the website using apache

We did that by changing the default configuration file of the webserver. We added the following lines to the default configuration file of the webserver.

sudo nano /etc/apache2/sites-available/example.com.conf

sudo htpasswd -c /etc/apache2/.htpasswd shawon

Now we can access the website by using the username and password.

TASK 3

Now we will implement more advanced authentication for the website using apache & MySQL

We did that by changing the default configuration file of the webserver. We added the following lines to the default configuration file of the webserver.
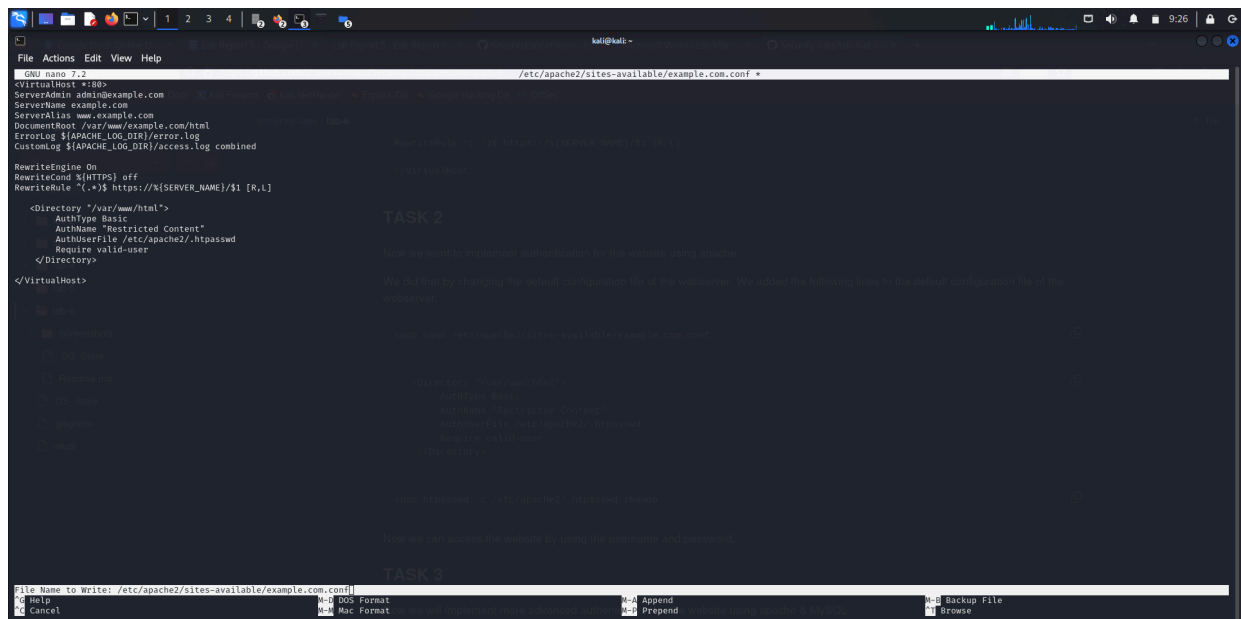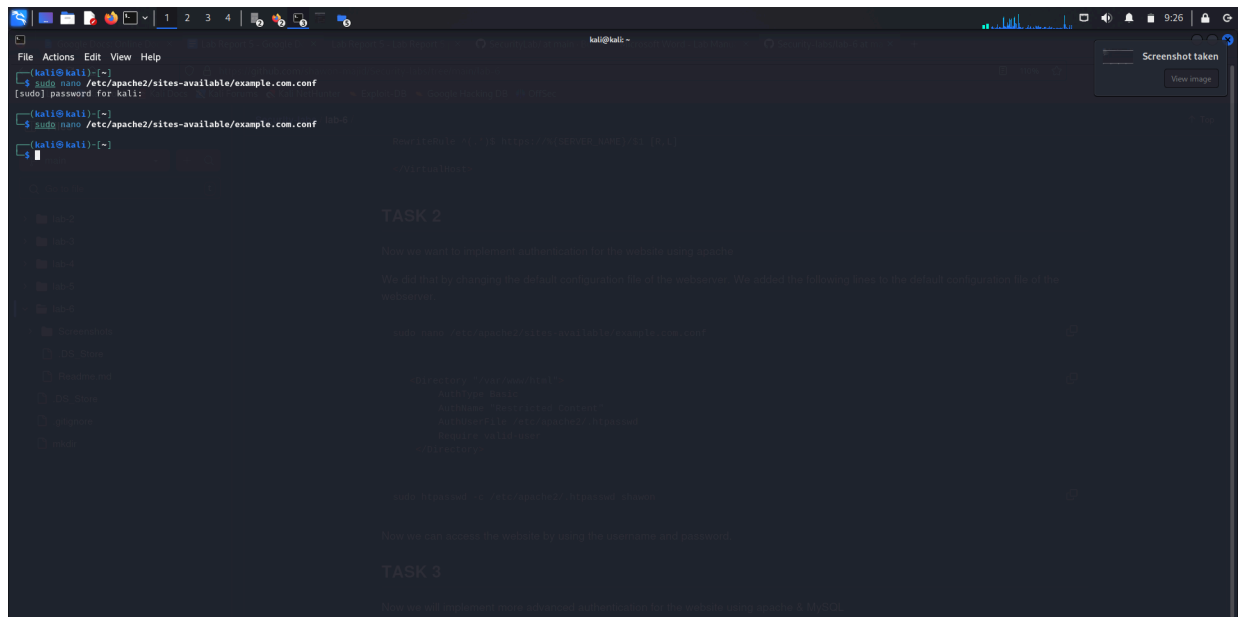
sudo nano /etc/apache2/sites-available/example.com.conf

After setting username and password in the MySQL database, we can access the website by using the username and password.

```
File   Actions   Edit   View   Help

┌──(kali㉿kali)-[~]
└─$ sudo nano /etc/apache2/sites-available/example.com.conf
[sudo] password for kali:

┌──(kali㉿kali)-[~]
└─$ sudo nano /etc/apache2/sites-available/example.com.conf

┌──(kali㉿kali)-[~]
└─$ sudo htpasswd -c /etc/apache2/.htpasswd hridi
New password:
Re-type new password:
Adding password for user hridi

┌──(kali㉿kali)-[~]
└─$ sudo nano /etc/apache2/sites-available/example.com.conf

┌──(kali㉿kali)-[~]
└─$ ▯
```

```
File   Actions   Edit   View   Help

  GNU nano 7.2                          /etc/apache2/sites-available/example.com.conf *
<VirtualHost *:80>
ServerAdmin admin@example.com
ServerName example.com
ServerAlias www.example.com
DocumentRoot /var/www/example.com/html
ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined

RewriteEngine On
RewriteCond %{HTTPS} off
RewriteRule ^(.*)$ https://%{SERVER_NAME}/$1 [R,L]

    <Directory "/var/www/html">
        AuthType Basic
        AuthName "Restricted Content"
        AuthUserFile /etc/apache2/.htpasswd
        Require valid-user
    </Directory>


    DBDriver mysql
    DBDParams "dbname=apache user=root pass=cse"
    DBDMin 4
    DBDKeep 8
    DBDMax 20
    DBDExptime 300
    <Directory "/var/www/example.com/html">
        AuthType Basic
        AuthName "My Server"
        AuthBasicProvider socache dbd
        AuthnCacheProvideFor dbd
        AuthnCacheContext my-server
        Require valid-user
        AuthDBDUserPWQuery "SELECT password FROM users WHERE username = %s"
    </Directory>

</VirtualHost>




File Name to Write: /etc/apache2/sites-available/example.com.conf
^C Help                              M-D DOS Format      M-A Append       M-B Backup File
^C Cancel                            M-M Mac Format      M-P Prepend      ^T Browse
```