Task1

Sudo apt update

Sudo install apache2


```
abdelrahman@abdelrahman-lap:~$ sudo systemctl start apache2
[sudo] password for abdelrahman:
abdelrahman@abdelrahman-lap:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
     Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: >
     Active: active (running) since Sat 2025-04-26 13:50:53 EEST; 12min ago
       Docs: https://httpd.apache.org/docs/2.4/
    Process: 1639 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SU>
   Main PID: 1702 (apache2)
      Tasks: 83 (limit: 18200)
     Memory: 30.8M (peak: 32.0M)
        CPU: 201ms
     CGroup: /system.slice/apache2.service
             ├─1702 /usr/sbin/apache2 -k start
             ├─1704 /usr/sbin/apache2 -k start
             ├─1705 /usr/sbin/apache2 -k start
             └─1706 /usr/sbin/apache2 -k start

Apr 26 13:50:53 abdelrahman-lap systemd[1]: Starting apache2.service - The Apac>
Apr 26 13:50:53 abdelrahman-lap apachectl[1683]: AH00558: apache2: Could not re>
Apr 26 13:50:53 abdelrahman-lap systemd[1]: Started apache2.service - The Apach>
lines 1-18/18 (END)
abdelrahman@abdelrahman-lap:~$ sudo systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
abdelrahman@abdelrahman-lap:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
     Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: >
     Active: active (running) since Sat 2025-04-26 13:50:53 EEST; 13min ago
       Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 1702 (apache2)
```

===

Task2 – task3

Sudo nano pageName

Redirect 301 /page1.html /page.html

We use 301 means moved permeanetlly


```
abdelrahman@abdelrahman-lap:~$ cd /var/www/html
abdelrahman@abdelrahman-lap:/var/www/html$ sudo nano page1.html
abdelrahman@abdelrahman-lap:/var/www/html$ sudo nano page2.html
abdelrahman@abdelrahman-lap:/var/www/html$ sudo nano /var/www/html/.htaccess
[sudo] password for abdelrahman:
Sorry, try again.
[sudo] password for abdelrahman:
abdelrahman@abdelrahman-lap:/var/www/html$ ^C
abdelrahman@abdelrahman-lap:/var/www/html$ sudo nano /var/www/html/.htaccess
abdelrahman@abdelrahman-lap:/var/www/html$ sudo systemctl restart apache2
abdelrahman@abdelrahman-lap:/var/www/html$ sudo htpasswd -c /etc/apache2/.htpasswd abdelrahman
New password:
Re-type new password:
Adding password for user abdelrahman
abdelrahman@abdelrahman-lap:/var/www/html$ sudo vim .htaccess
abdelrahman@abdelrahman-lap:/var/www/html$ sudo systemctl reload apache2
abdelrahman@abdelrahman-lap:/var/www/html$ sudo vim .htaccess
abdelrahman@abdelrahman-lap:/var/www/html$ sudo vim .htaccess
abdelrahman@abdelrahman-lap:/var/www/html$ sudo systemctl reload apache2
abdelrahman@abdelrahman-lap:/var/www/html$ sudo mkdir protected
abdelrahman@abdelrahman-lap:/var/www/html$ sudo vim .htaccess
abdelrahman@abdelrahman-lap:/var/www/html$ sudo cd protected
sudo: cd: command not found
sudo: "cd" is a shell built-in command, it cannot be run directly.
sudo: the -s option may be used to run a privileged shell.
sudo: the -D option may be used to run a command in a specific directory.
abdelrahman@abdelrahman-lap:/var/www/html$ sudo cd /var/www/html/protected
sudo: cd: command not found
sudo: "cd" is a shell built-in command, it cannot be run directly.
sudo: the -s option may be used to run a privileged shell.
sudo: the -D option may be used to run a command in a specific directory.
```

Task3 – task4

We use put the following code insed the .htaccess
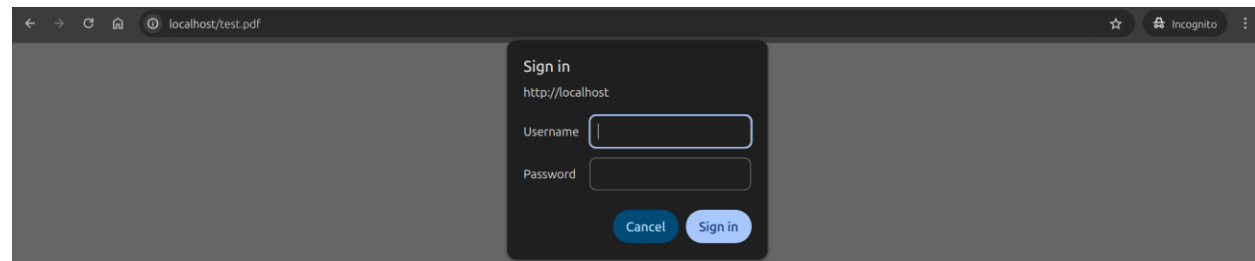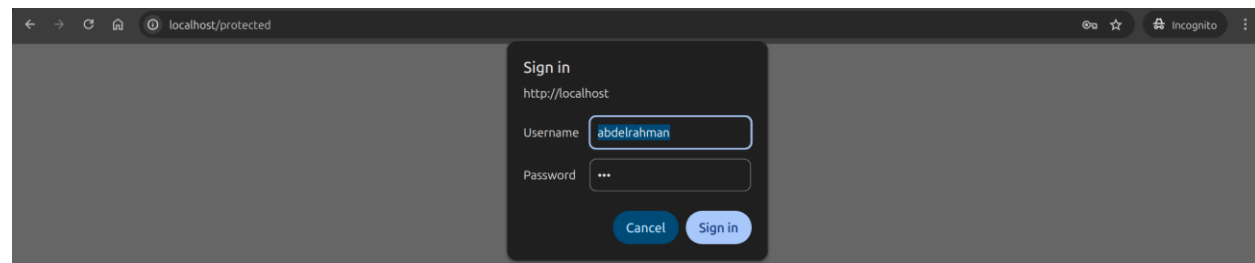


```
Redirect 301 /page1.html /page2.html

Authtype basic
AuthName "please confirm ur id"
AuthUserFile /etc/apache2/.htpasswd
Require valid-user

<FilesMatch "\.pdf$">
        Authtype basic
        AuthName "please confirm ur id"
        AuthUserFile /etc/apache2/.htpasswd
        Require valid-user
</FilesMatch>
```


Task5


```
abdelrahman@abdelrahman-lap:/var/www/html$ sudo vim .htaccess
abdelrahman@abdelrahman-lap:/var/www/html$ sudo mkdir vipOnly
[sudo] password for abdelrahman:
abdelrahman@abdelrahman-lap:/var/www/html$ cd vipOnly/
abdelrahman@abdelrahman-lap:/var/www/html/vipOnly$ sudo vim .htaccess
abdelrahman@abdelrahman-lap:/var/www/html/vipOnly$ sudo vim .htaccess
abdelrahman@abdelrahman-lap:/var/www/html/vipOnly$ sudo htpasswd /etc/apache2/.htpasswd abdh
New password:
Re-type new password:
Adding password for user abdh
abdelrahman@abdelrahman-lap:/var/www/html/vipOnly$ sudo vim .htaccess
abdelrahman@abdelrahman-lap:/var/www/html/vipOnly$ sudo vim .htaccess
abdelrahman@abdelrahman-lap:/var/www/html/vipOnly$
```

You can paste the image from the clipboard.

```
AuthType basic
AuthName "Vip only"
AuthUserFile /etc/apache2/.htpasswd
Require user abdh
```

Task6

```
abdelrahman@abdelrahman-lap:/var/www/html/vipOnly$ ls
abdelrahman@abdelrahman-lap:/var/www/html/vipOnly$ sudo vim test.txt
abdelrahman@abdelrahman-lap:/var/www/html/vipOnly$ sudo vim .htaccess
abdelrahman@abdelrahman-lap:/var/www/html/vipOnly$
```

```
Require user abdh


options -Indexes
```

Index of /vipOnly

Name	Last modified	Size	Description
Parent Directory		-	
test.txt	2025-04-26 16:49	6	

localhost/vipOnly/

Forbidden

You don't have permission to access this resource.

Apache/2.4.58 (Ubuntu) Server at localhost Port 80

Task7

```
DirectoryIndex page1.html
~
~
```

localhost/page2.html

hello page 2