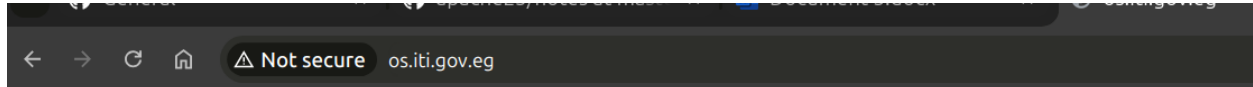Task8 lab 1 – task4 lab 2

```
<VirtualHost *:80>
        ServerAdmin webmaster@os.iti.gov.eg
        DocumentRoot /var/www/os/iti.gov.eg
        ServerName os.iti.gov.eg
        ErrorLog ${APACHE_LOG_DIR}/error.log
        CustomLog ${APACHE_LOG_DIR}/access.log combined
</VirtualHost>
```

```
abdelrahman@abdelrahman-lap:~$ sudo vim /etc/apache2/sites-available/os.iti.gov.
eg.conf
abdelrahman@abdelrahman-lap:~$ sudo a2ensite os.iti.gov.eg.conf
Enabling site os.iti.gov.eg.
To activate the new configuration, you need to run:
  systemctl reload apache2
abdelrahman@abdelrahman-lap:~$ sudo systemctl restart apache2
abdelrahman@abdelrahman-lap:~$ sudo mkdir   /var/www/os.iti.gov.eg
abdelrahman@abdelrahman-lap:~$ sudo touch   /var/www/os.iti.gov.eg/index.html
127.0.0.1 localhost os.iti.gov.eg
127.0.1.1 abdelrahman-lap
```

← → C ⌂ ⚠ Not secure   os.iti.gov.eg

hello os iti is working

Task9 lab 1

```
abdelrahman@abdelrahman-lap:~$ sudo a2enmod rewrite
Enabling module rewrite.
To activate the new configuration, you need to run:
  systemctl restart apache2
abdelrahman@abdelrahman-lap:~$ 
```

Task10 lab 1

Rerwite mudle is improtant for:

Improving SEO (search engange optomazation) and User exprince,

enhances securty and access control,

Manging urls ,

Handling dynamic content and rooting
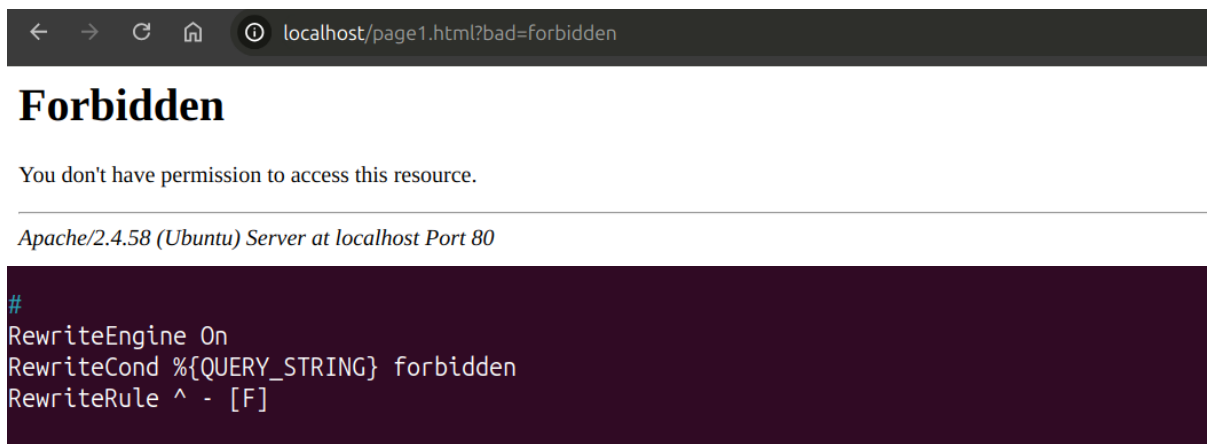
Task1 lab2

```
abdelrahman@abdelrahman-lap:~$ sudo apachectl -V | grep MPM
Server MPM:     event
abdelrahman@abdelrahman-lap:~$ sudo a2dismod mpm_event
Module mpm_event disabled.
To activate the new configuration, you need to run:
  systemctl restart apache2
abdelrahman@abdelrahman-lap:~$ sudo apachectl -V | grep MPM
AH00534: apache2: Configuration error: No MPM loaded.
Server MPM:
abdelrahman@abdelrahman-lap:~$ sudo a2enmod mpm_worker
Considering conflict mpm_event for mpm_worker:
Considering conflict mpm_prefork for mpm_worker:
Enabling module mpm_worker.
To activate the new configuration, you need to run:
  systemctl restart apache2
```
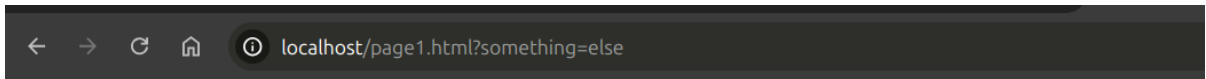
Task2 lab 2

```
abdelrahman@abdelrahman-lap:~$ apachectl -M
AH00558: apache2: Could not reliably determine the server's fully qualified domain
this message
Loaded Modules:
 reqtimeout_module (shared)
 rewrite_module (shared)
 setenvif module (shared)
```
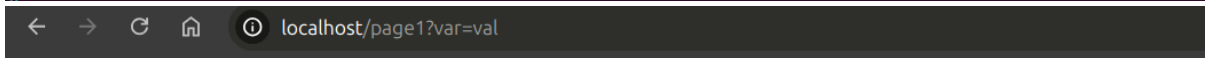
Task3 lab 2

← → C ⌂ ⓘ localhost/page1.html?bad=forbidden

Forbidden

You don't have permission to access this resource.

Apache/2.4.58 (Ubuntu) Server at localhost Port 80

A-

```
#
RewriteEngine On
RewriteCond %{QUERY_STRING} forbidden
RewriteRule ^ - [F]
```

localhost/page1.html?something=else

hello page 1

B-

```
#
RewriteCond %{QUERY_STRING} .+
RewriteRule ^(.*)$ /$1? [R=301,L]
```

localhost/page1?var=val

Not Found

C-
```
#
RewriteCond %{REQUEST_URI} ^/page1$
RewriteCond %{QUERY_STRING} (^|&)var=val(&|$)
RewriteRule ^page1$ /page2? %{QUERY_STRING} [R=301,L]
```

```
#
RewriteCond %{QUERY_STRING} ^([^=]+)=([^&]+)$
RewriteRule ^path$ /path/%1/%2? [R=301,L]
```
D-

```
#
RewriteRule ^example/([^/]+)/([^/]+)$ /something.cgi?arg=$1&other=$2 [R=301,L]
```

E-