**Section-3 Linux For Different Purposes**

**Lesson-02: Setting UP a Webserver using APACHE-PHP-MYSQL**

First we will install the httpd package

# yum install httpd

Now for installing PHP modules in our Centos 7 machine we will do

# yum install php php-mysql php-pdo php-gd php-mbstring -y

To get full information about the PHP on your browser we will be creating a simple php file which shows us the information about php

echo "<?php phpinfo(); ?>" > /var/www/html/info.php

we will restart the httpd service

In browser we type

http://testlab.local/info.php

Now for database we will install MariaDB

# yum install mariadb-server mariadb -y

Now we will start the mariadb service

Next we will set a password on mariadb for that we will run a mariadb built-in script.

# mysql\_secure\_installation

Next we will confirm that password has been set or not

# mysql -u root -p

Now phpmyadmin we have to install epel repository, its another repository which contains extra packages including phpmyadmin as well, PHPMYADMIN is used for remote mysql administration.

# yum install epel-release -y

# yum update

# yum install phpmyadmin

# vi /etc/httpd/conf.d/phpMyadmin.conf

# service httpd restart

Next we will try to access the phpmyadmin portal in browser.

http://192.168.18.170/phpmyadmin

Mysql credentials will be used for this portal

**Lesson-03: Configuring Apache for TLS / SSL Certificate**

First we will install the necessary packages

# yum install mod\_ssl openssl

# cd /etc/pki/tls/certs

For generating a self-signed ssl certificate use the below commands

# openssl genpkey -algorithm rsa -pkeyopt rsa\_keygen\_bits:2048 -out web01.testlab.com.key

# openssl request -new -key web01.testlab.com.key -out web01.testlab.com.csr

# openssl x509 -req -days 365 -signkey web01.testlab.com.key -in web01.testlab.com.csr -out web01.testlab.com.crt

# vi /etc/httpd/conf.d/ssl.conf

Now we will create a vhost configuration for our website.

<VirtualHost \*:443>

DocumentRoot "/var/www/html"

ServerName web01.testlab.com:443

SSLCertificateFile /etc/pki/tls/certs/web01.testlab.com.crt

SSLCertificateKeyFile /etc/pki/tls/certs/web01.testlab.com.key

<\VirtualHost>