6. Install LEMP stack (avoid installing mysql) and open info.php on port 80 and print message info.php.

LEMP stack

L = Linux

E = Nginx

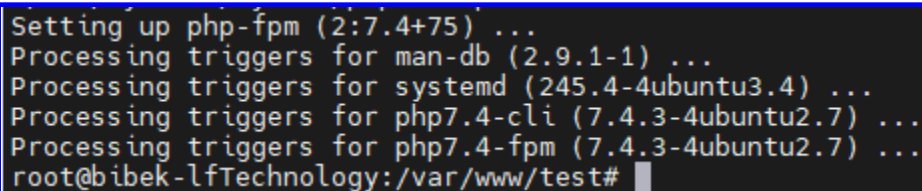M = MySQL (Not-needed for this assignment)

P = PHP

Our system is Ubuntu(Linux) and We have already installed nginx,

We have to print info.php

PHP

Installing php-fpm

apt install -y php-fpm

```
Setting up php-fpm (2:7.4+75) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for systemd (245.4-4ubuntu3.4) ...
Processing triggers for php7.4-cli (7.4.3-4ubuntu2.7) ...
Processing triggers for php7.4-fpm (7.4.3-4ubuntu2.7) ...
root@bibek-lfTechnology:/var/www/test# 
```
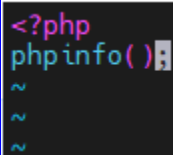
php7.4 -fpm has been installed by default

No need to install php-mysql as we are not integrating MySQL database

Creating php folder in /var/www

mkdir /var/www/php

Creating file info.php

vi /var/www/php/info.php

```
<?php
phpinfo();
~
~
~
```

Creating php.conf to host php directory and print info.php

vi /etc/nginx/sites-available

```
server {
    listen 88;
    server_name localhost;
    root /var/www/php;

    index index.html index.htm index.php;

    location / {
        try_files $uri $uri/ =404;
    }

    location ~ \.php$ {
        include snippets/fastcgi-php.conf;
        fastcgi_pass unix:/var/run/php/php7.4-fpm.sock;
    }

    location ~ /\.ht {
        deny all;
    }

}
```

Here I have used 88 port as 80 port is already occupied **or we have to unlink the previous conf file.**

And Index.html is also not created in root directory so it will throw error 404 error through try_files

location ~ \.php$:

This location block handles the actual PHP processing by pointing Nginx to the fastcgi-php.conf

configuration file and the php7.4-fpm.sock file, which declares what socket is associated with

php-fpm and serves info.php in the root directory.

location ~ /\.ht {

    deny all;

  }

The last location block deals with .htaccess files, which Nginx does not process.

By adding the deny all directive, if any .htaccess files happen to find their way into the document root

,they will not be served to visitors.

Now creating symlink of php.conf from sites-available to sites-enabled

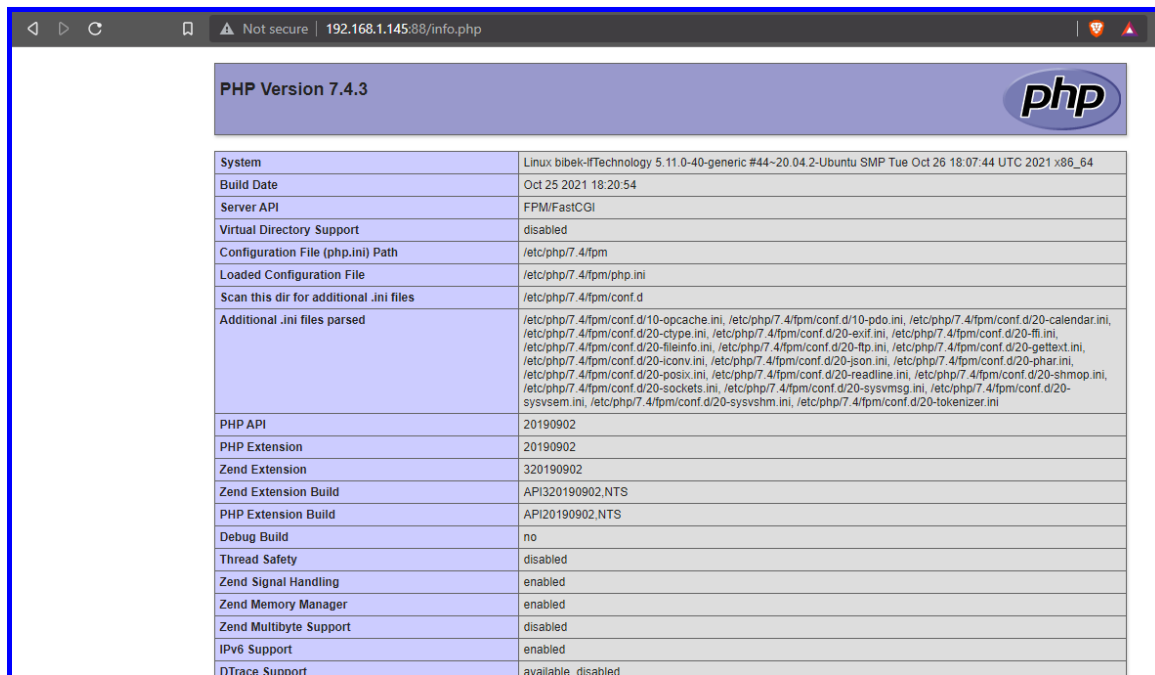**ln -sr /etc/nginx/sites-available/php.conf /etc/nginx/sites-enabled/**

Checking for syntactical error

nginx -t

And restarting nginx

```
root@bibek-lfTechnology:/var/www/test# ln -sr /etc/nginx/sites-available/php.con
f /etc/nginx/sites-enabled/
root@bibek-lfTechnology:/var/www/test# nginx -t
nginx: the configuration file /etc/nginx/nginx.conf syntax is ok
nginx: configuration file /etc/nginx/nginx.conf test is successful
root@bibek-lfTechnology:/var/www/test# systemctl restart nginx
```
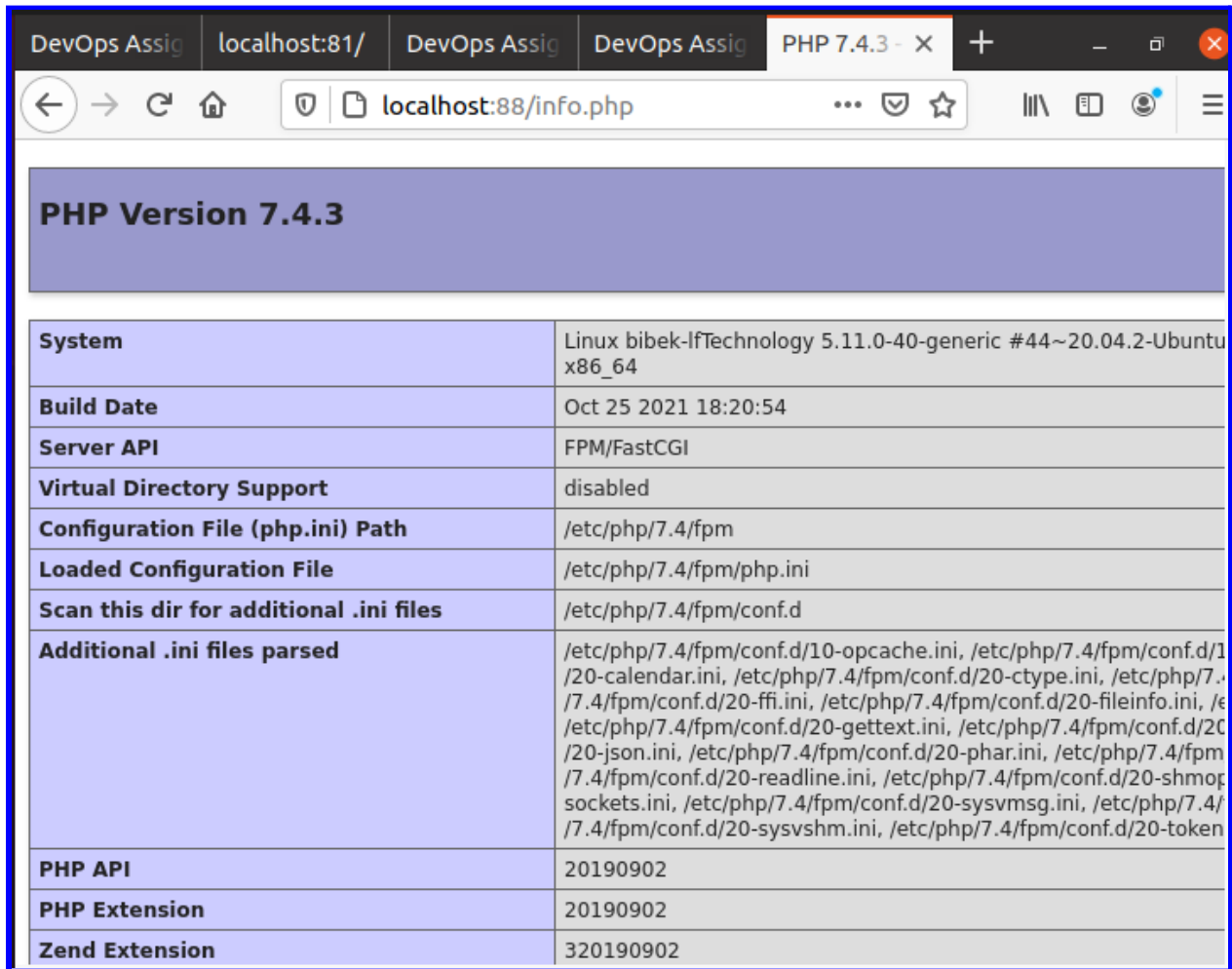
My vm is in bridge mode, so if I hit my vm ip with 88 port/info.php, we can see the following output

If we browse localhost on port 88 with info.php, We can see the same output

PHP Version 7.4.3

System	Linux bibek-lfTechnology 5.11.0-40-generic #44~20.04.2-Ubuntu x86_64
Build Date	Oct 25 2021 18:20:54
Server API	FPM/FastCGI
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/7.4/fpm
Loaded Configuration File	/etc/php/7.4/fpm/php.ini
Scan this dir for additional .ini files	/etc/php/7.4/fpm/conf.d
Additional .ini files parsed	/etc/php/7.4/fpm/conf.d/10-opcache.ini, /etc/php/7.4/fpm/conf.d/1 /20-calendar.ini, /etc/php/7.4/fpm/conf.d/20-ctype.ini, /etc/php/7. /7.4/fpm/conf.d/20-ffi.ini, /etc/php/7.4/fpm/conf.d/20-fileinfo.ini, /e /etc/php/7.4/fpm/conf.d/20-gettext.ini, /etc/php/7.4/fpm/conf.d/20 /20-json.ini, /etc/php/7.4/fpm/conf.d/20-phar.ini, /etc/php/7.4/fpm /7.4/fpm/conf.d/20-readline.ini, /etc/php/7.4/fpm/conf.d/20-shmop sockets.ini, /etc/php/7.4/fpm/conf.d/20-sysvmsg.ini, /etc/php/7.4/ /7.4/fpm/conf.d/20-sysvshm.ini, /etc/php/7.4/fpm/conf.d/20-token
PHP API	20190902
PHP Extension	20190902
Zend Extension	320190902