Lab report no: 07

Name of the report: Basic of routes in php laravel framework.

Objectives:

- o Understand how routing works
- o Learn how to define a routes
- o Learn how to work with routes.
- o How to call controllers from routes.
- o How to call webpage

Theory:

Routes means what will happen writing a specific thing after url.

Routes is a directory on the root project directory. Routes have api, channel, console and web php file. All the routs store in the 'web.php' file. When an user hit any 'url' then it looking for match 'url' in the routs. Then it return something like function or text or controller function or redirect from one page to other page.

All Laravel routes are defined in your route files, which are located in the routes directory. These files are automatically loaded by the framework. The routes/web.php file defines routes that are for your web interface. These routes are assigned the web middleware group, which provides features like session state and CSRF protection. The routes in routes/api.php are stateless and are assigned the api middleware group

For most applications, you will begin by defining routes in your routes/web.php file. The routes defined in routes/web.php may be accessed by entering the defined route's URL in your browser.

Why we need routing?
Routing is one of the essential concepts in Laravel. Routing in Laravel allows you to route all your application requests to its appropriate controller. The main and primary routes in Laravel acknowledge and accept a URI (Uniform Resource Identifier) along with a closure, given that it should have to be a simple and expressive way of routing. In this chapter, you will learn about the routing concept of Laravel.

app > routes > routes files.

Here is the example of all the routes file of our project: the routes files are api.php,

channels.php, console.php, web.php
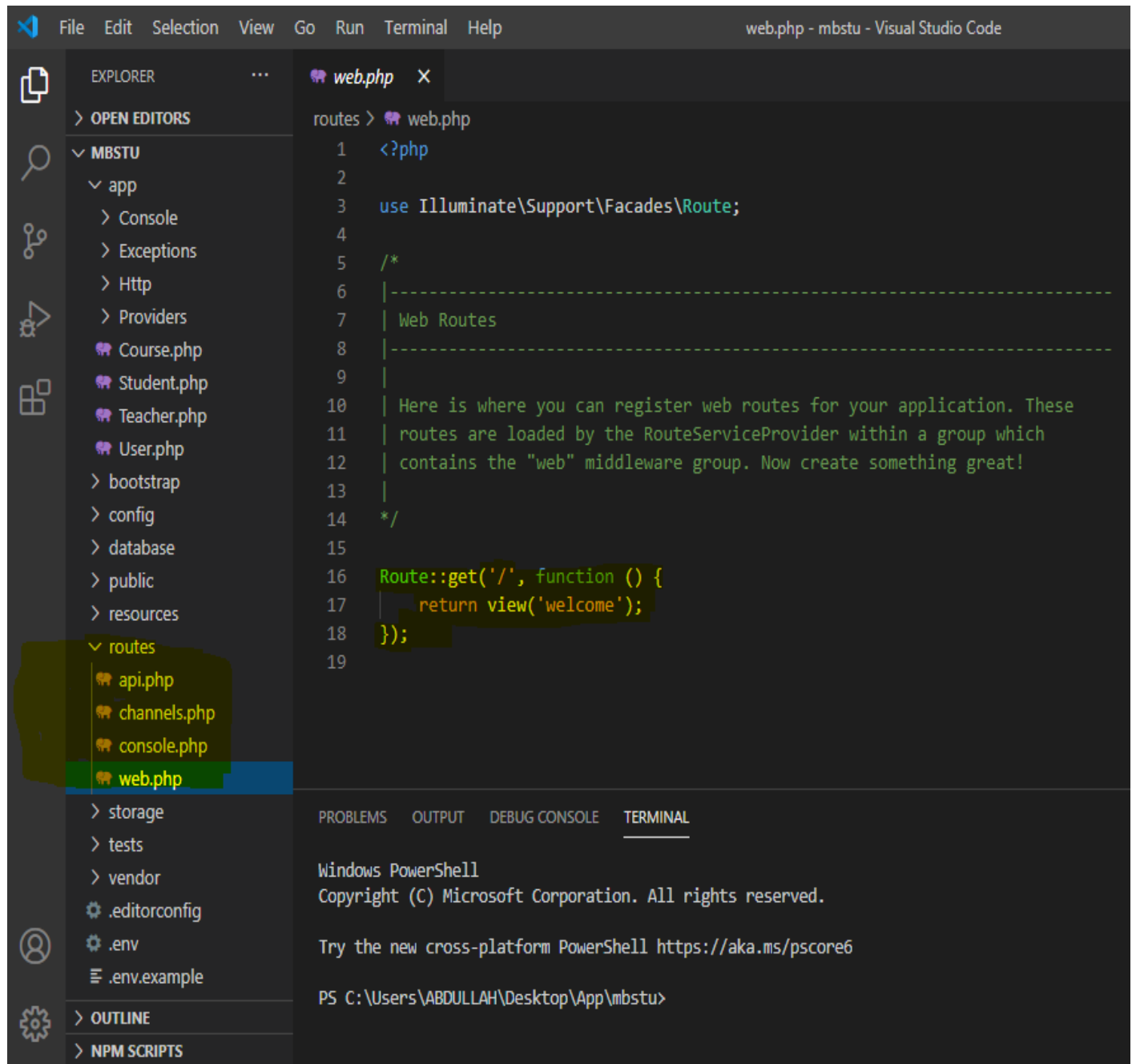
Creating a custom route:
From the web.php file we can create a custom routes by providing the type of the routes, routes name and value that will return. The different types of routes are

- Route::get($uri, $callback)
- Route::post($uri, $callback);
- Route::put($uri, $callback);
- Route::patch($uri, $callback);
- Route::delete($uri, $callback);
- Route::options($uri, $callback);

Here I create write which type is **get** and name is **group** which will return the following message
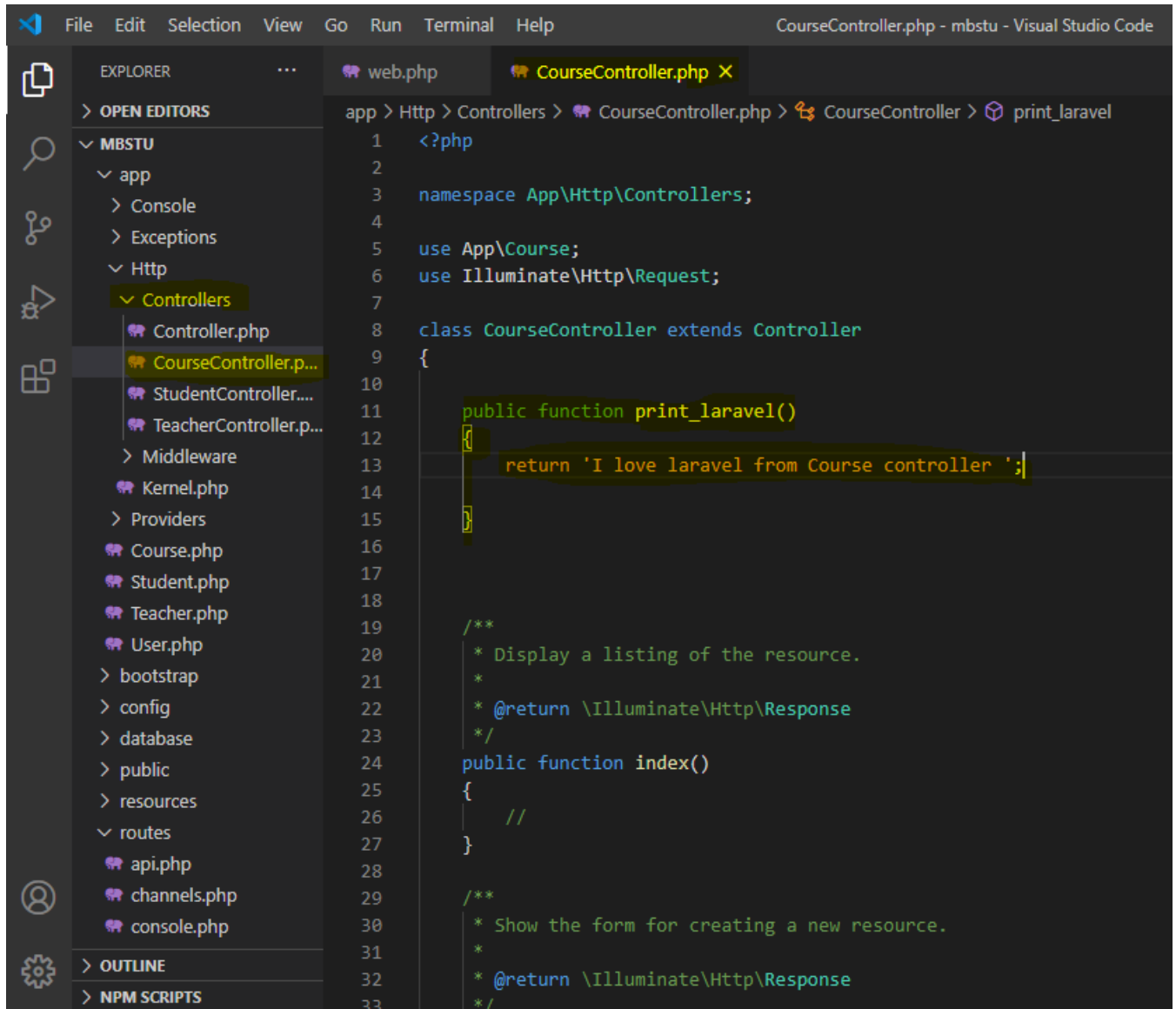
```php
web.php

routes > web.php
1    <?php
2
3    use Illuminate\Support\Facades\Route;
4
5
6    Route::get('/', function () {
7        return view('welcome');
8
9    });
10
11   Route::get('/group', function () {
12       return 'Welcome to our group.Our group members are Abdullah,Shourob,Zaber,shohag,Harun';
13
14   });
15
```

localhost:8000/group

Welcome to our group.Our group members are Abdullah,Shourob,Zaber,shohag,Harun
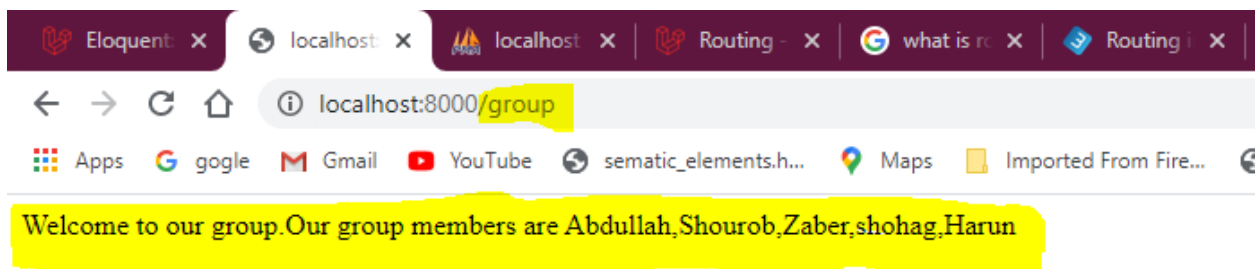
Calling controllers function using routes:

We can create function within a controllers and call it by using a route. Here I create a function with in a CourseController called 'print_laravel' which return a message 'I love laravel from Course controller'. We also create a get type routes name 'check' which will call the course controller function.
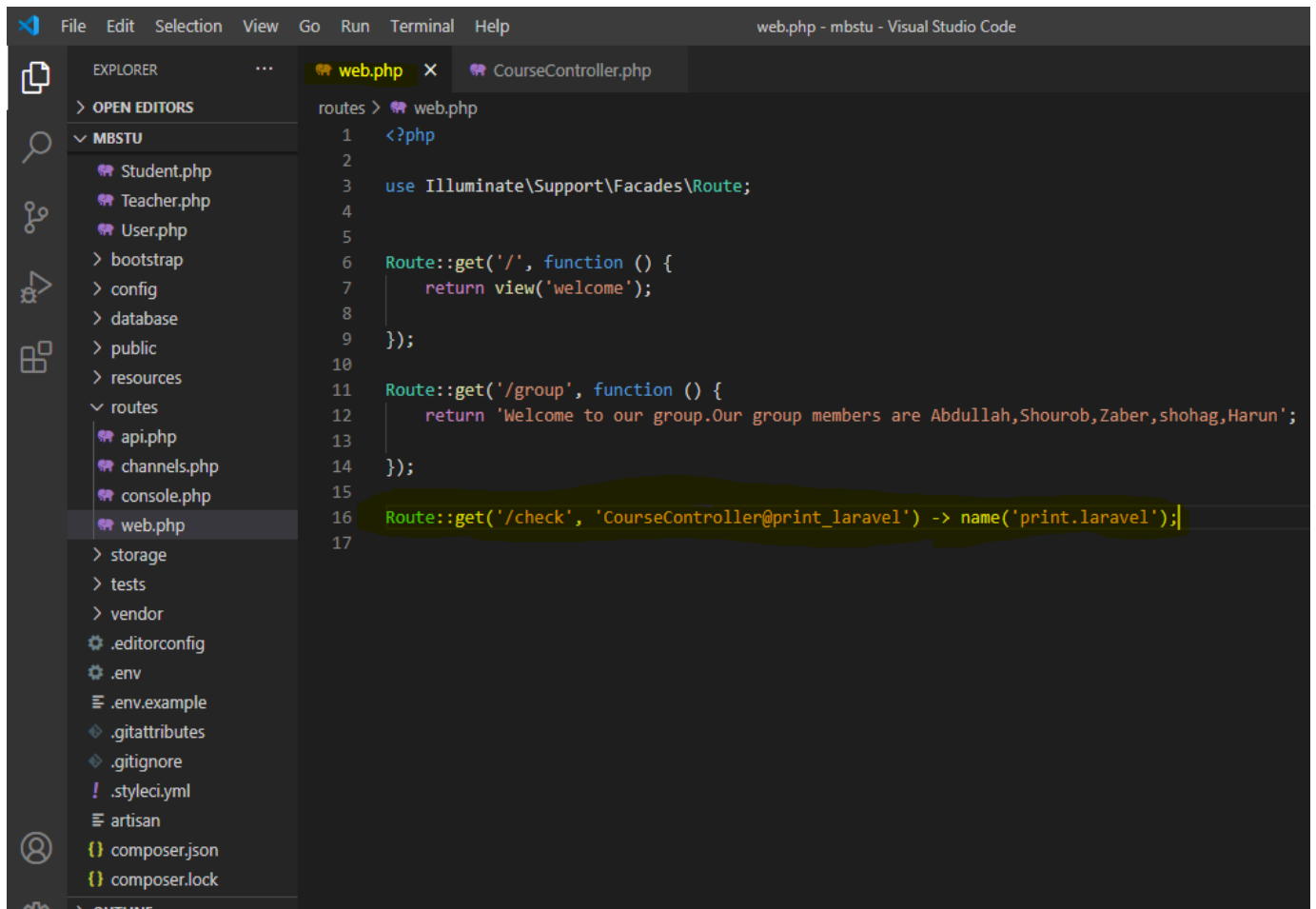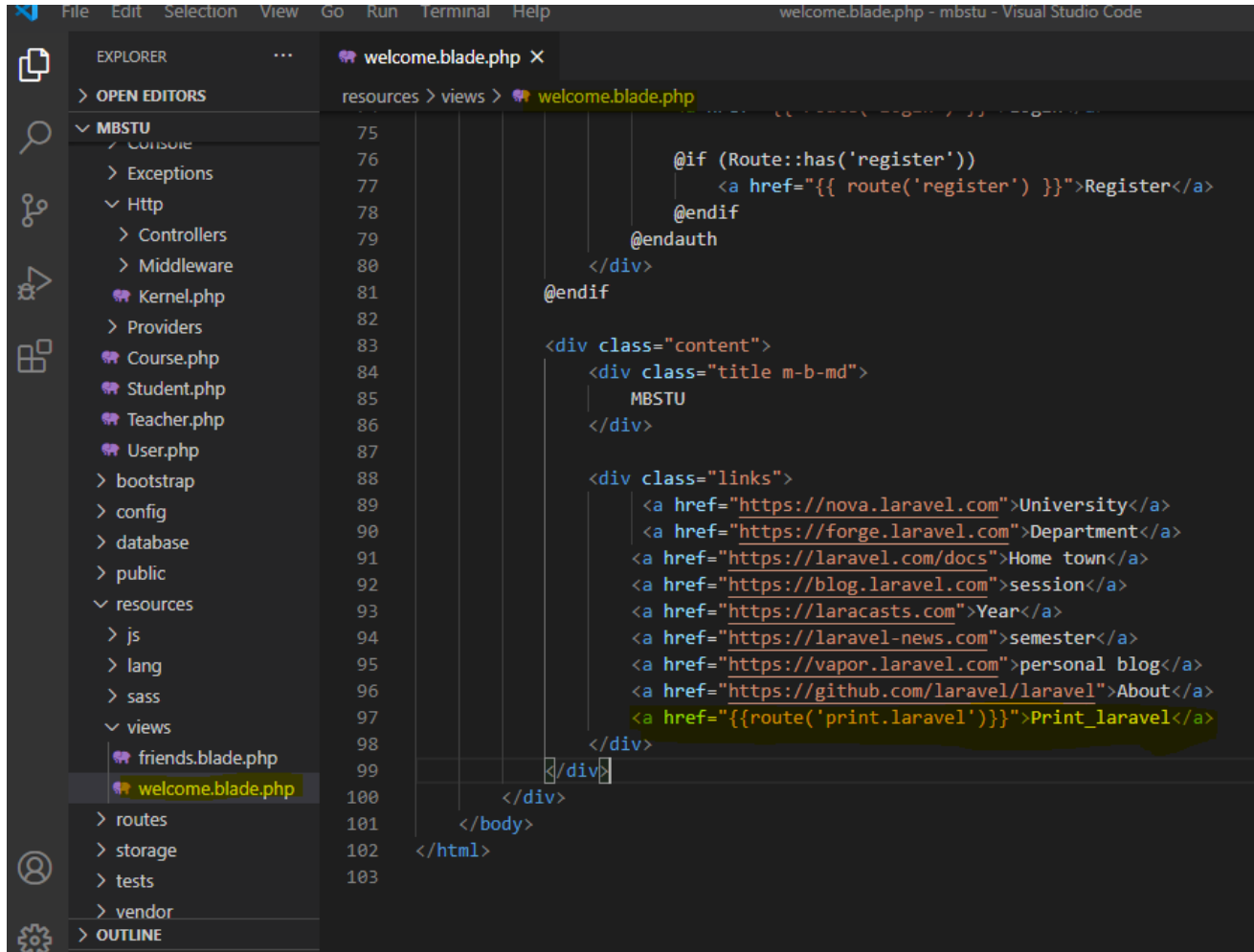
Creating Controller function:

Calling the function from check routes:

```php
<?php

use Illuminate\Support\Facades\Route;


Route::get('/', function () {
    return view('welcome');

});

Route::get('/group', function () {
    return 'Welcome to our group.Our group members are Abdullah,Shourob,Zaber,shohag,Harun';

});

Route::get('/check', 'CourseController@print_laravel') -> name('print.laravel');
```

Output from web:

localhost:8000/check

I love laravel from Course controller
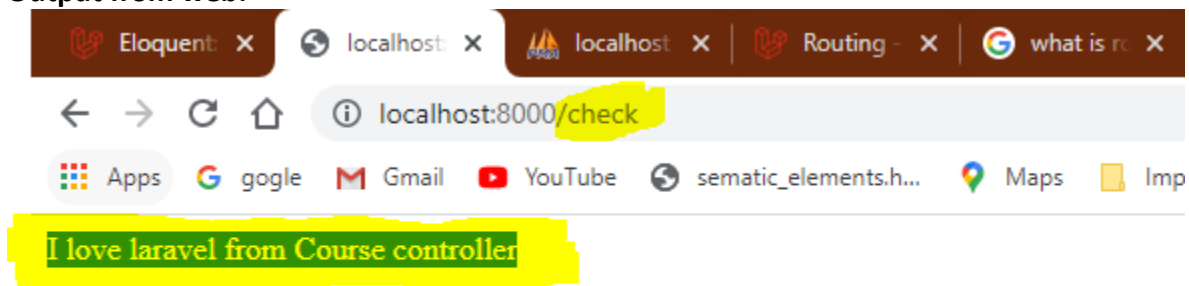
Calling a route from web page:
The route check which we create previously can be called form web page. For this first we
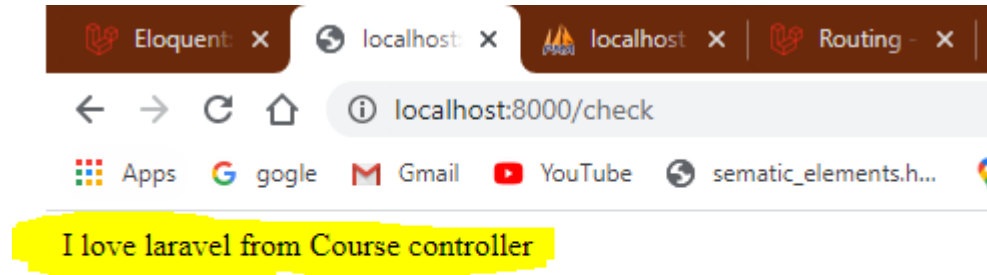created menu in home page called print_laravel.

If we click on the print_laravel menu we will get the output like this.

I love laravel from Course controller

Discussion:
This lab helps me to understanding the basics of routes.
I successfully completed all the things such as create a routes, accessing the routes, creating a function with in controllers and call it by routes, calling a routes from web pages. This lab helps me to understanding the basics of routes