

LATIHAN PRAKTIKUM PENGEMBANGAN APLIKASI WEB

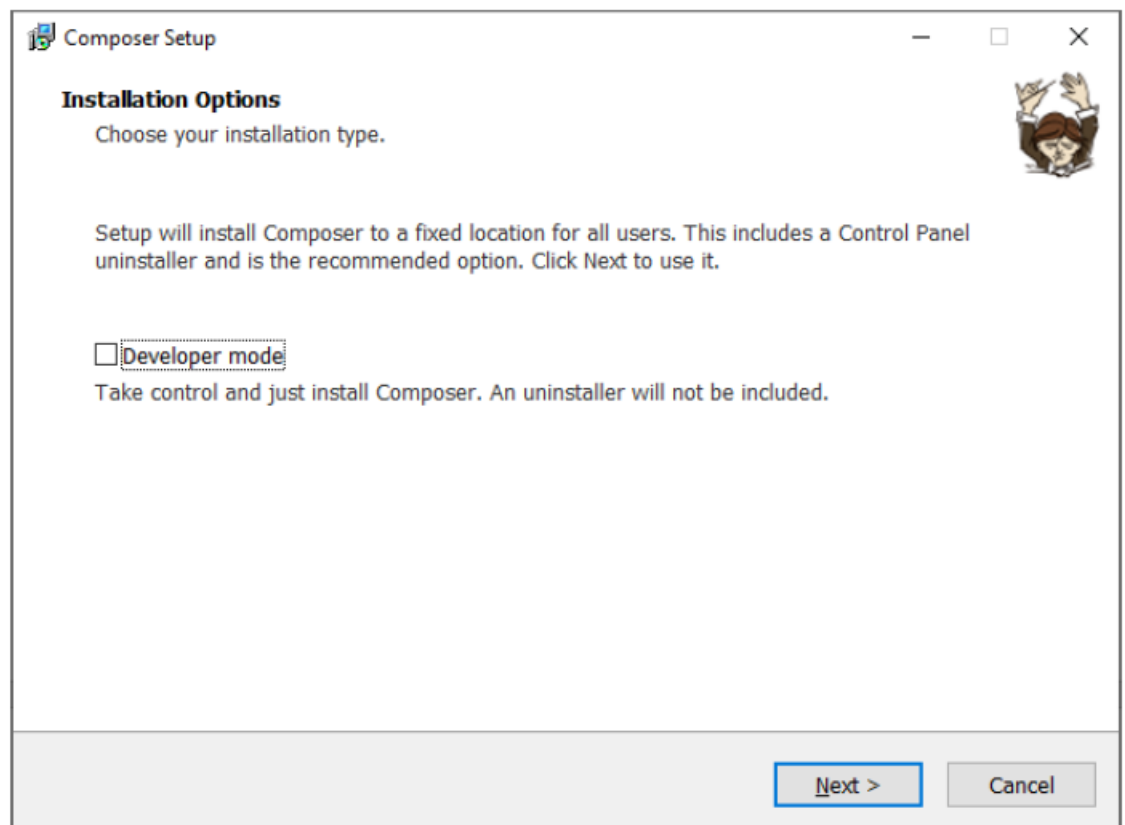
BAB : *FRAMEWORK* LARAVEL (1)
NAMA : DANI ADRIAN
NIM : 225150201111009
ASISTEN : - IBAR HUTTAQI SULTHON
 - MUHAMMAD AMMAR
TANGGAL PRAKTIKUM : 02/05/2024

LATIHAN 1

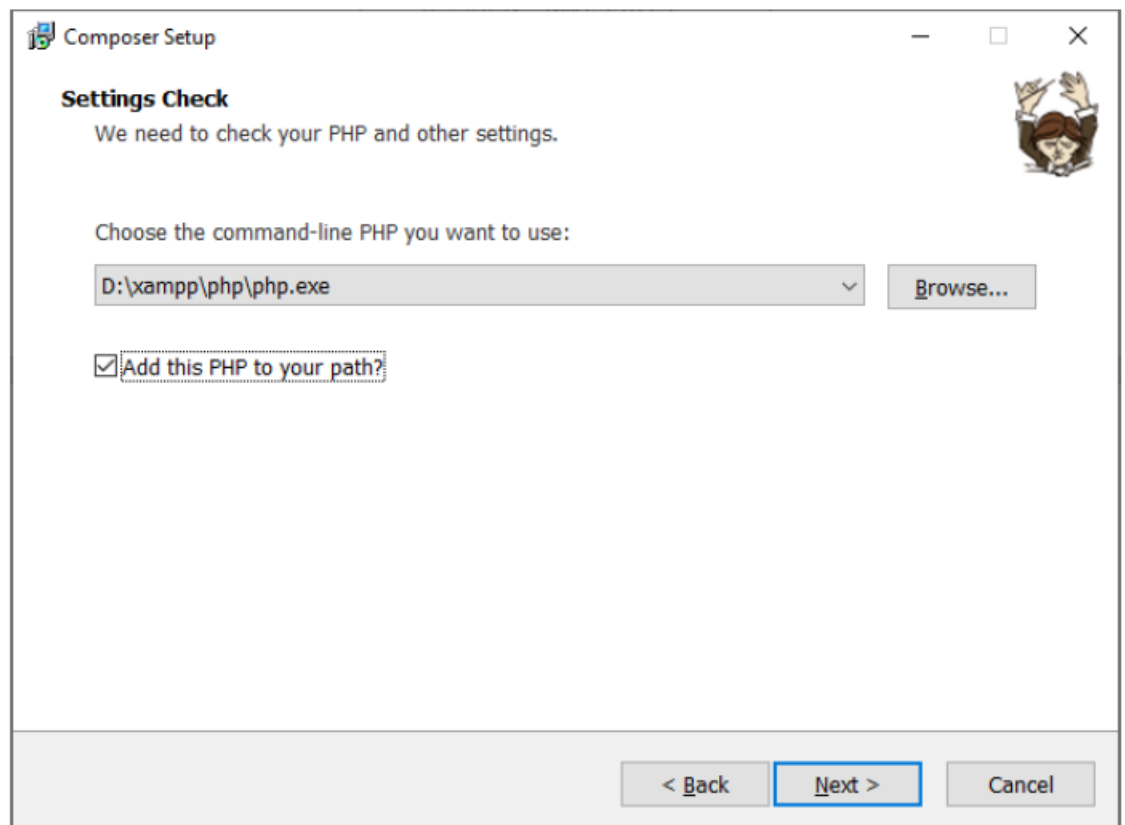
A. Soal

a) Instalasi Composer

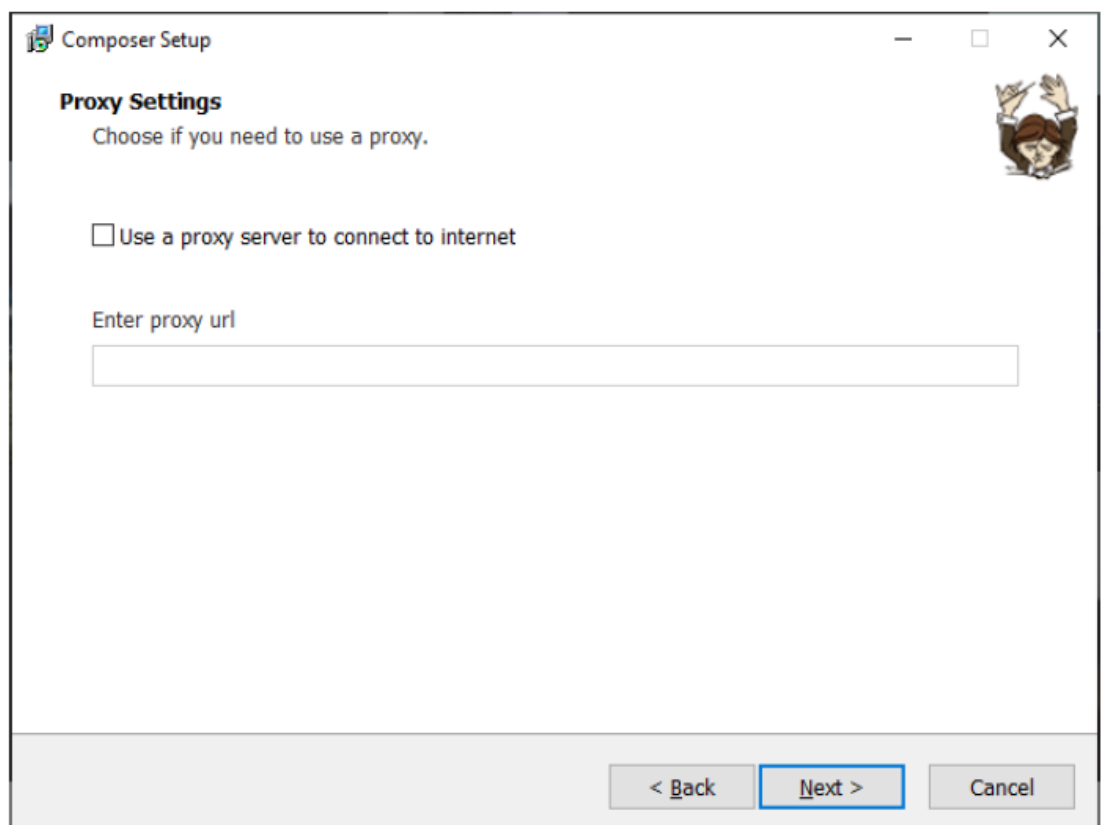
1. Instalasi *framework* Laravel dapat menggunakan Composer, sebuah *dependency manager* untuk PHP. *Download* dan lakukan instalasi Composer melalui Alamat <https://getcomposer.org/Composer-Setup.exe>.



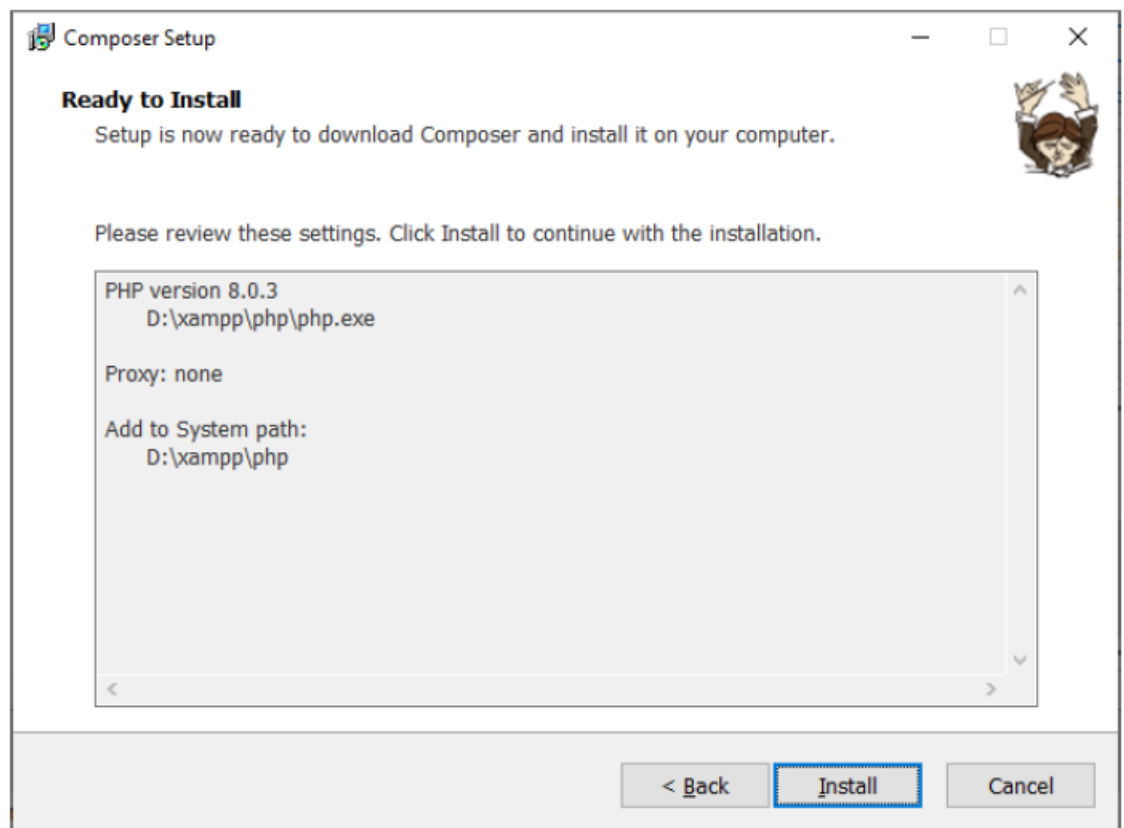
2. *Browse* dan pilih *file* "php.exe" yang ada pada direktori instalasi XAMPP. Centang pilihan "Add this PHP to your path?". Klik "Next".



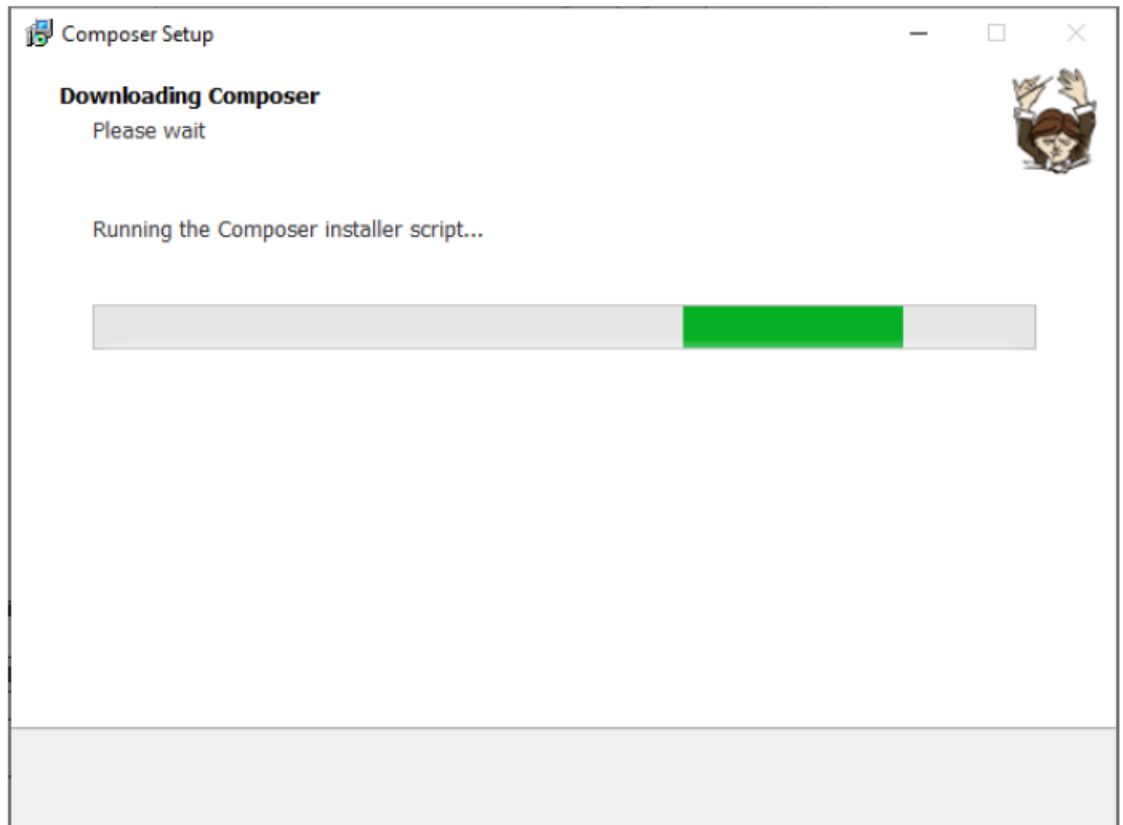
3. Kosongi pilihan "Use a proxy..." Klik "Next"



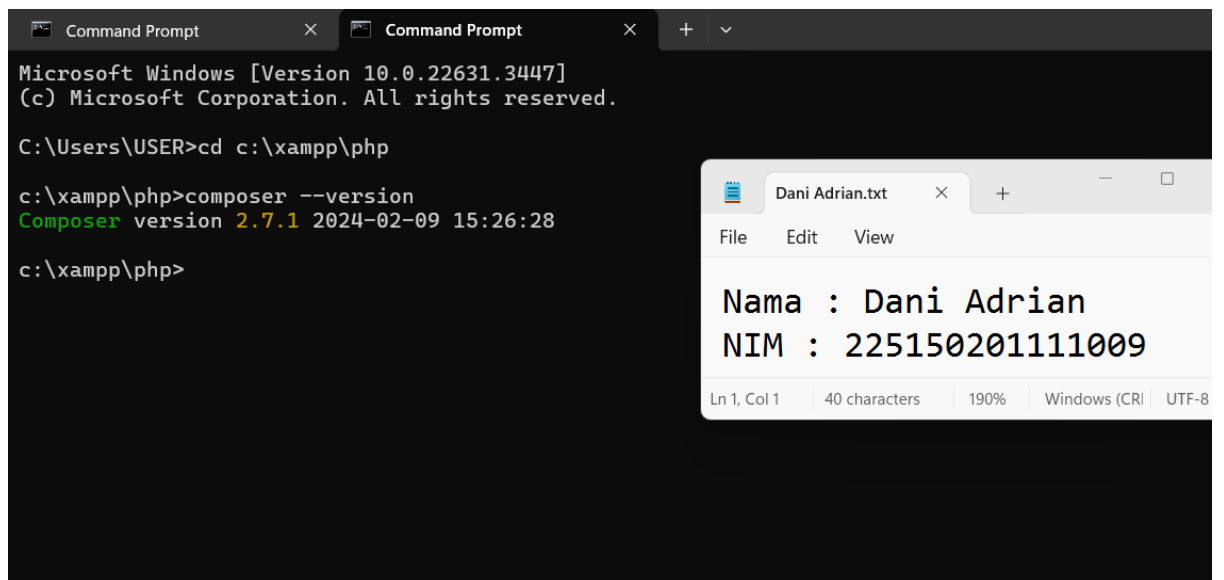
4. Klik “Install”.



5. Tunggu hingga proses instalasi selesai.



B. Screenshoot



C. Syntax

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D. Penjelasan

Composer telah berhasil di install

LATIHAN 2

A. Soal

b) Instalasi Laravel

1. Setelah Composer berhasil di-*install*, instalasi Laravel dapat dilakukan sekaligus dengan pembuatan *project* Laravel menggunakan Composer. Pertama-tama, pastikan bahwa Composer dapat diakses pada *command prompt* atau *console* menggunakan perintah “composer” hingga menghasilkan tampilan seperti berikut.
2. Arahkan direktori aktif pada *command prompt* atau *console* ke direktori “htdocs” pada direktori instalasi XAMPP. Lalu, jalankan perintah:

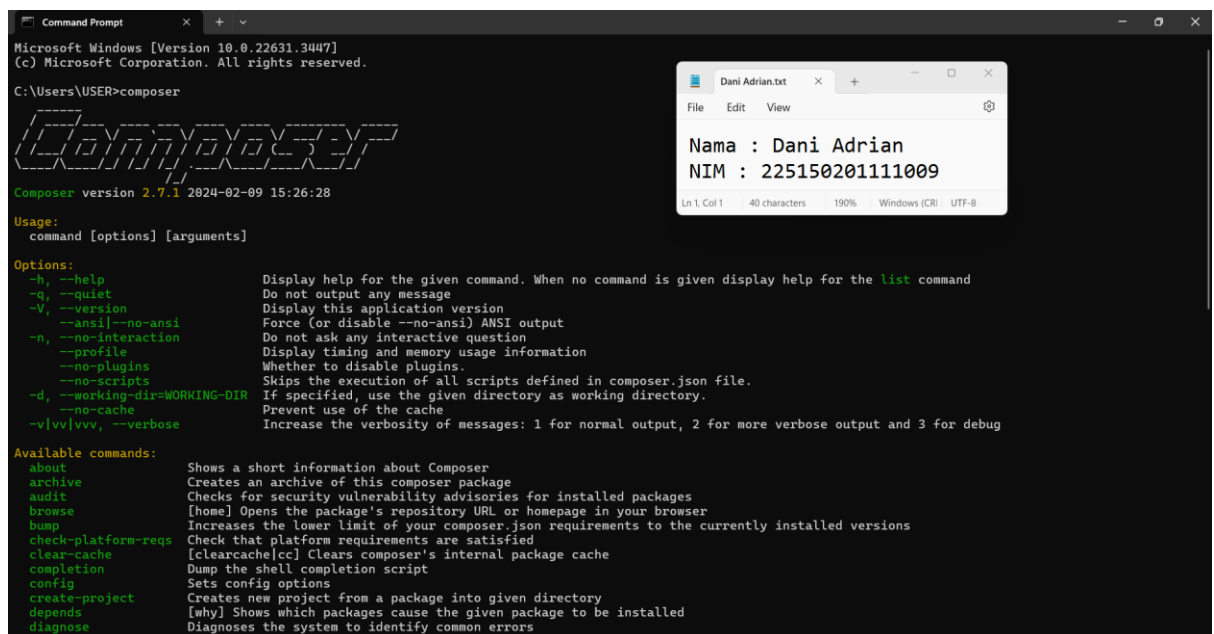
```
composer create-project laravel/laravel Laravel-app
```

3. Jalankan perintah berikut menggunakan command prompt atau console dengan hak akses administrator:

```
echo 127.0.0.1 laravel-app.test >>  
C:\Windows\System32\drivers\etc\hosts
```

Jelaskan apa yang terjadi setelah perintah di atas dieksekusi dan mengapa perintah tersebut dijalankan.

B. Screenshoot

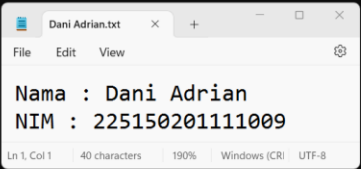


```
Microsoft Windows [Version 10.0.22631.3447]  
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\USER>composer  
  
Composer version 2.7.1 2024-02-09 15:26:28  
  
Usage:  
  command [options] [arguments]  
  
Options:  
  -h, --help                Display help for the given command. When no command is given display help for the list command  
  -q, --quiet               Do not output any message  
  -V, --version              Display this application version  
  --ansi|--no-ansi          Force (or disable --no-ansi) ANSI output  
  -n, --no-interaction       Do not ask any interactive question  
  --profile                 Display timing and memory usage information  
  --no-plugins              Whether to disable plugins.  
  --no-scripts              Skips the execution of all scripts defined in composer.json file.  
  -d, --working-dir=WORKING-DIR If specified, use the given directory as working directory.  
  --no-cache                Prevent use of the cache  
  -v|vv|vvv, --verbose      Increase the verbosity of messages: 1 for normal output, 2 for more verbose output and 3 for debug  
  
Available commands:  
  about                     Shows a short information about Composer  
  archive                   Creates an archive of this composer package  
  audit                     Checks for security vulnerability advisories for installed packages  
  browse                    [home] Opens the package's repository URL or homepage in your browser  
  bump                      Increases the lower limit of your composer.json requirements to the currently installed versions  
  check-platform-reqs       Check that platform requirements are satisfied  
  clear-cache               [clearcache|cc] Clears composer's internal package cache  
  completion               Dump the shell completion script  
  config                    Sets config options  
  create-project             Creates new project from a package into given directory  
  depends                   [why] Shows which packages cause the given package to be installed  
  diagnose                  Diagnoses the system to identify common errors
```

```
Command Prompt
Microsoft Windows [Version 10.0.22631.3447]
(c) Microsoft Corporation. All rights reserved.

C:\Users\USER>cd C:\xampp\htdocs

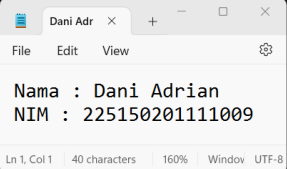
C:\xampp\htdocs>composer create-project laravel/laravel laravel-app
Creating a "laravel/laravel" project at "./laravel-app"
Installing laravel/laravel (v11.0.6)
- Downloading laravel/laravel (v11.0.6)
- Installing laravel/laravel (v11.0.6): Extracting archive
Created project in C:\xampp\htdocs\laravel-app
> @php -r "file_exists('.env') || copy('.env.example', '.env');"
Loading composer repositories with package information
Updating dependencies
Lock file operations: 111 installs, 0 updates, 0 removals
- Locking brick/math (0.12.1)
- Locking carbonphp/carbon-doctrine-types (3.2.0)
- Locking dflydev/dot-access-data (v3.0.2)
- Locking doctrine/inflector (2.0.10)
- Locking doctrine/lexer (3.0.1)
- Locking dragonmantank/cron-expression (v3.3.3)
- Locking egulias/email-validator (4.0.2)
- Locking fakerphp/faker (v1.23.1)
- Locking filp/whoops (2.15.4)
- Locking fruitcake/php-cors (v1.3.0)
- Locking graham-campbell/result-type (v1.1.2)
- Locking guzzlehttp/guzzle (7.8.1)
- Locking guzzlehttp/promises (2.0.2)
- Locking guzzlehttp/psr7 (2.6.2)
- Locking guzzlehttp/uri-template (v1.0.3)
- Locking hamcrest/hamcrest-php (v2.0.1)
- Locking laravel/framework (v11.6.0)
- Locking laravel/pint (v1.15.3)
- Locking laravel/prompts (v0.1.21)
- Locking laravel/sail (v1.29.1)
- Locking laravel/serializable-closure (v1.3.3)
- Locking laravel/tinker (v2.9.0)
- Locking league/commonmark (2.4.2)
- Locking league/config (v1.2.0)
- Locking league/flysystem (3.27.0)
- Locking league/flysystem-local (3.25.1)
```

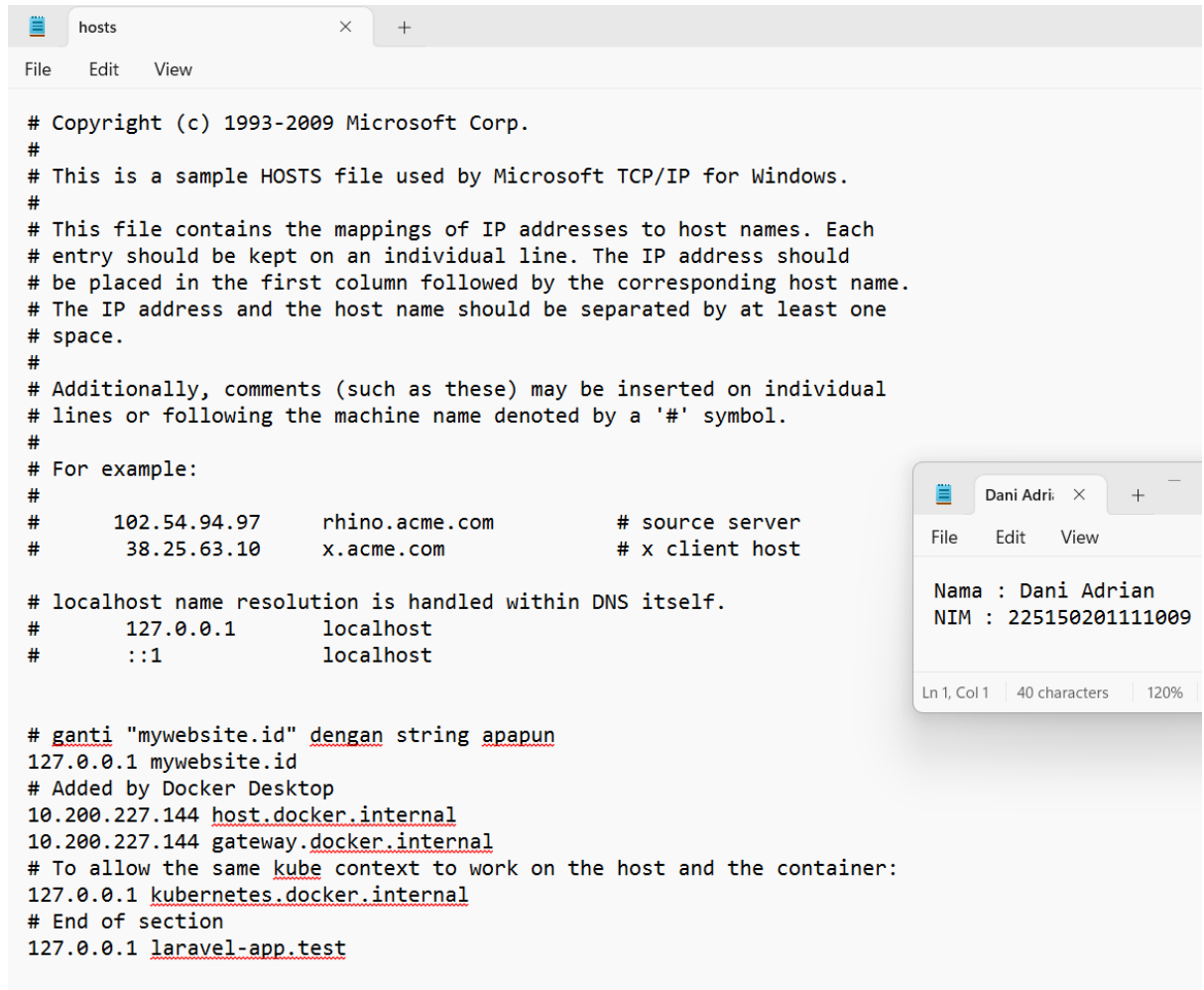


```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.22631.3447]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\System32>echo 127.0.0.1 laravel-app.test >> C:\Windows\System32\drivers\etc\hosts

C:\Windows\System32>
```





C. Syntax

1	
---	--

D. Penjelasan

Ketika perintah tersebut dieksekusi. Maka, perintah tersebut akan langsung menuliskan 127.0.0.1 laravel-app.test (*Only Write (Unread)*) pada direktori C:\Windows\System32\drivers\etc\hosts dengan tujuan file hosts.

LATIHAN 3

A. Soal

4. Buka file "<direktori XAMPP>\apache\conf\extra\httpd-vhosts.conf".
Tambahkan baris berikut pada akhir file tersebut:

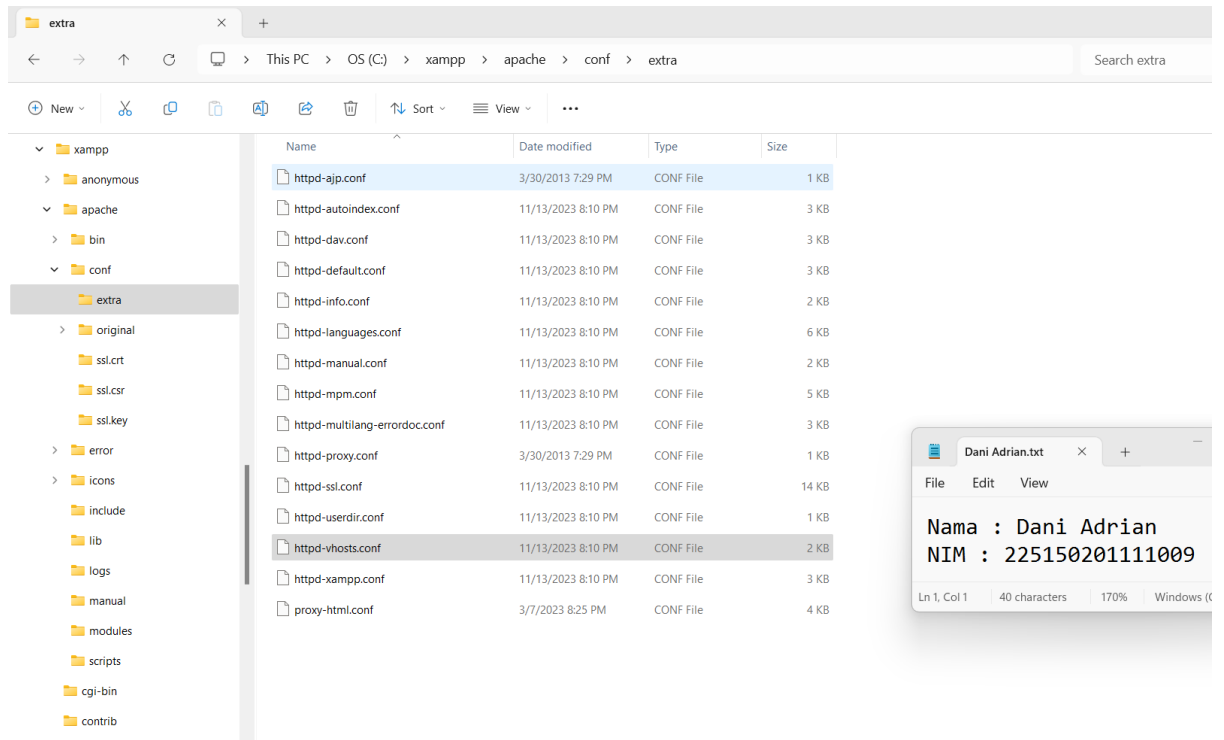
1.	<VirtualHost laravel-app.test:80>
2.	DocumentRoot "<direktori XAMPP>/htdocs/laravel-app/public"

3. </VirtualHost>

Sesuaikan “<direktori XAMPP>” dengan lokasi instalasi XAMPP pada komputer masing-masing.

Jelaskan apa yang terjadi setelah penambahan kode di atas dan mengapa kode tersebut dibuat.

B. Screenshoot



httpd-vhosts.conf

File
Edit
View

```

# Virtual Hosts
#
# Required modules: mod_log_config

# If you want to maintain multiple domains/hostnames on your
# machine you can setup VirtualHost containers for them. Most configurations
# use only name-based virtual hosts so the server doesn't need to worry about
# IP addresses. This is indicated by the asterisks in the directives below.
#
# Please see the documentation at
# <URL:http://httpd.apache.org/docs/2.4/vhosts/>
# for further details before you try to setup virtual hosts.
#
# You may use the command line option '-S' to verify your virtual host
# configuration.

#
# Use name-based virtual hosting.
#
##NameVirtualHost *:80
#
# VirtualHost example:
# Almost any Apache directive may go into a VirtualHost container.
# The first VirtualHost section is used for all requests that do not
# match a ##ServerName or ##ServerAlias in any <VirtualHost> block.
#
##<VirtualHost *:80>
#     ##ServerAdmin webmaster@dummy-host.example.com
#     ##DocumentRoot "C:/xampp/htdocs/dummy-host.example.com"
#     ##ServerName dummy-host.example.com
#     ##ServerAlias www.dummy-host.example.com
#     ##ErrorLog "logs/dummy-host.example.com-error.log"
#     ##CustomLog "logs/dummy-host.example.com-access.log" common
##</VirtualHost>

##<VirtualHost *:80>
#     ##ServerAdmin webmaster@dummy-host2.example.com
#     ##DocumentRoot "C:/xampp/htdocs/dummy-host2.example.com"
#     ##ServerName dummy-host2.example.com
#     ##ErrorLog "logs/dummy-host2.example.com-error.log"
#     ##CustomLog "logs/dummy-host2.example.com-access.log" common
##</VirtualHost>

<VirtualHost laravel-app.test:80>
DocumentRoot "C:/xampp/htdocs/laravel-app/public"
</VirtualHost>

```

Dani Adri

File
Edit
View

Nama : Dani Adrian
NIM : 225150201111009

Ln 2, Col 15 | 40 characters

C. Syntax

1	
---	--

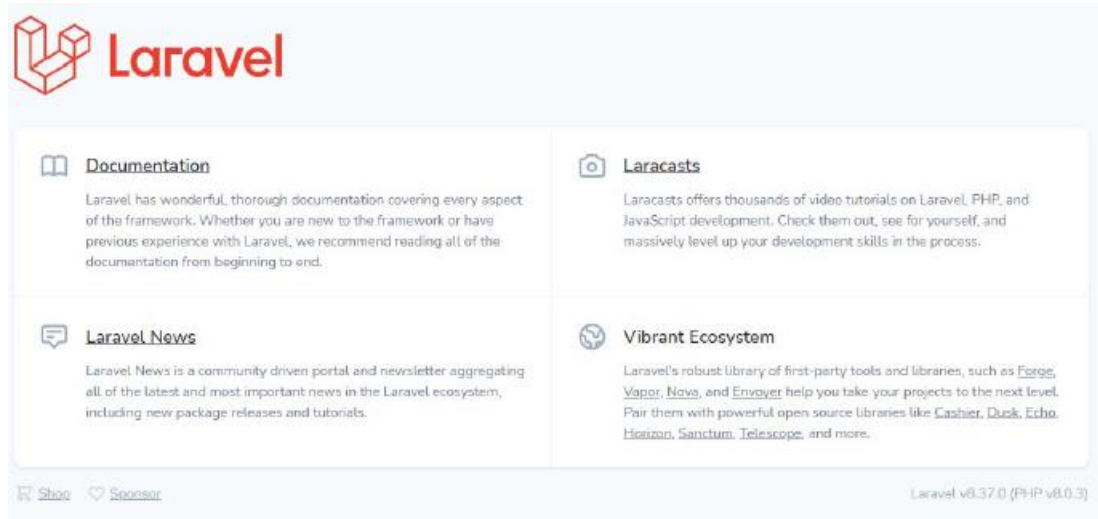
D. Penjelasan

Kode tersebut ditambahkan agar keluaran halaman dari pranala laravel-app.test sama dengan keluaran dari direktori C:\xampp\htdocs\laravel-app\public. Jangan lupa untuk melakukan restart pada XAMPP Control Panel agar bisa menghasilkan keluaran yang sesuai dan maksimal.

LATIHAN 4

A. Soal

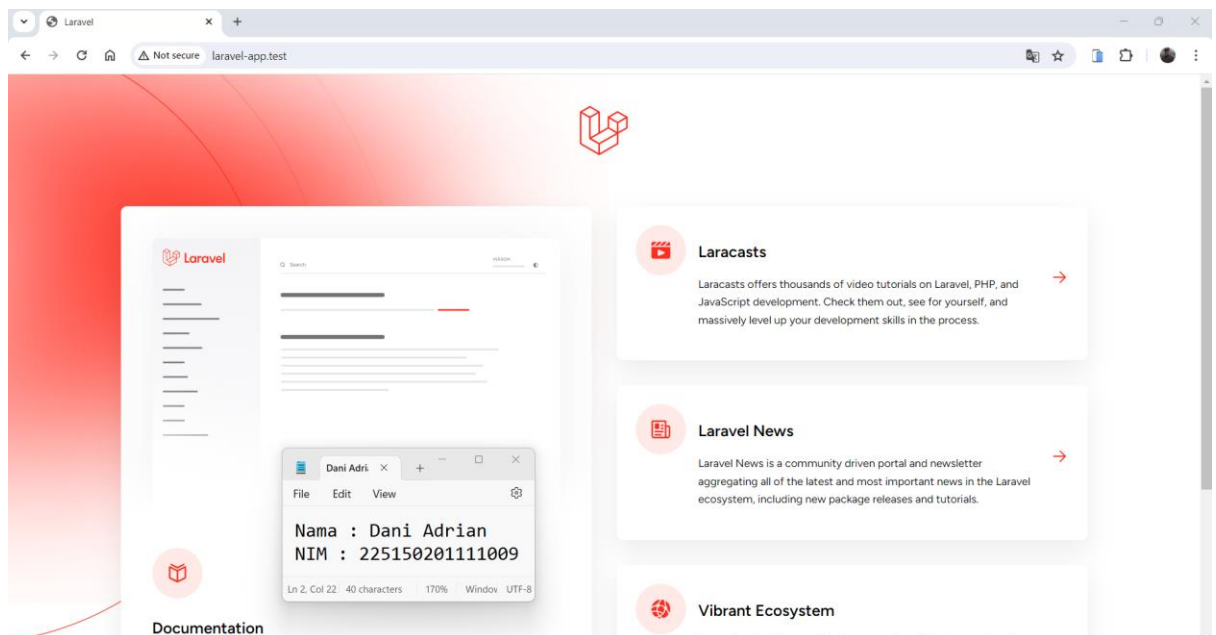
5. Buka alamat “laravel-app.test” pada *browser*. Tampilan seperti berikut akan muncul. Ini menandakan bahwa Laravel telah berhasil di-*install*.



Jika gagal, silakan coba beberapa hal berikut:

1. Pastikan tidak ada kesalahan penulisan.
2. *Stop* lalu *start Apache web server*.

B. Screenshoot



C. Syntax

D. Penjelasan

laravel-app.test akan mengeluarkan output halaman defaultnya laravel (Bukan halaman XAMPP).

LATIHAN 5

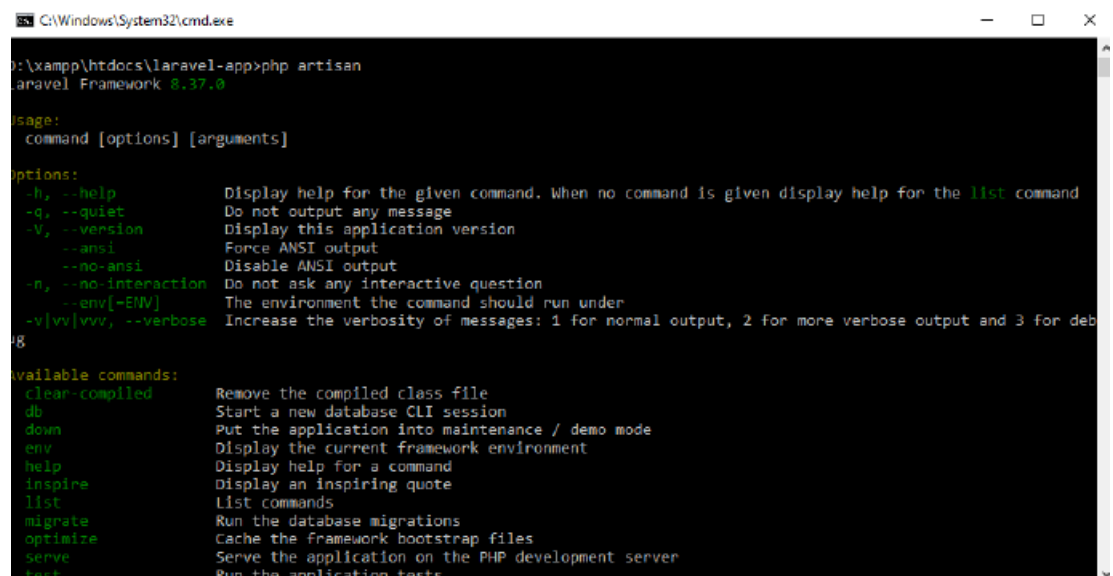
A. Soal

c) Artisan

1. Buka command prompt atau console dengan direktori aktif pada direktori project (<direktori XAMPP>\htdocs\laravel-app). Sesuaikan “<direktori XAMPP>” dengan direktori XAMPP pada komputer masing-masing. Pastikan juga bahwa file “php.exe” telah berada *path* sehingga perintah “php” dapat diakses di mana saja.
2. Jalankan perintah berikut untuk memastikan bahwa akses ke Artisan dapat dilakukan.

```
php artisan
```

3. Jika berhasil, maka tampilannya adalah seperti berikut.



```
C:\Windows\System32\cmd.exe

D:\xampp\htdocs\laravel-app>php artisan
Laravel Framework 8.37.0

Usage:
  command [options] [arguments]

Options:
  -h, --help            Display help for the given command. When no command is given display help for the list command
  -q, --quiet            Do not output any message
  -V, --version          Display this application version
  --ansi                Force ANSI output
  --no-ansi             Disable ANSI output
  -n, --no-interaction  Do not ask any interactive question
  --env[=ENV]           The environment the command should run under
  -v|vv|vvv, --verbose  Increase the verbosity of messages: 1 for normal output, 2 for more verbose output and 3 for debug

Available commands:
  clear-compiled  Remove the compiled class file
  db              Start a new database CLI session
  down            Put the application into maintenance / demo mode
  env             Display the current framework environment
  help            Display help for a command
  inspire         Display an inspiring quote
  list            List commands
  migrate         Run the database migrations
  optimize        Cache the framework bootstrap files
  serve           Serve the application on the PHP development server
  test           Run the application tests
```

B. Screenshoot

```
Microsoft Windows [Version 10.0.22631.3447]
(c) Microsoft Corporation. All rights reserved.

C:\Users\USER>cd c:\xampp\htdocs\laravel-app

c:\xampp\htdocs\laravel-app>php artisan
Laravel Framework 11.6.0

Usage:
  command [options] [arguments]

Options:
  -h, --help            Display help for the given command. When no command is given display help for the list command
  -q, --quiet           Do not output any message
  -V, --version         Display this application version
  --ansi|--no-ansi     Force (or disable --no-ansi) ANSI output
  -n, --no-interaction Do not ask any interactive question
  --env[=ENV]          The environment the command should run under
  -v|vv|vvv, --verbose Increase the verbosity of messages: 1 for normal output, 2 for more verbose output and 3 for debug

Available commands:
  about            Display basic information about your application
  clear-compiled   Remove the compiled class file
  completion       Dump the shell completion script
  db              Start a new database CLI session
  docs            Access the Laravel documentation
  down            Put the application into maintenance / demo mode
  env             Display the current framework environment
  help            Display help for a command
  inspire         Display an inspiring quote
  list            List commands
  migrate         Run the database migrations
  optimize        Cache framework bootstrap, configuration, and metadata to increase performance
  serve           Serve the application on the PHP development server
  test           Run the application tests
  tinker          Interact with your application
  up             Bring the application out of maintenance mode
  auth:clear-resets Flush expired password reset tokens
  cache           Flush the application cache
  cache:clear
```

C. Syntax

1	
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D. Penjelasan

Berhasil dieksekusi

LATIHAN 6

A. Soal

d) Controller

1. Jalankan perintah berikut untuk membuat controller baru dengan nama GreetController.

1.	php artisan make:controller GreetController
----	---

2. Edit kode tersebut (app/Http/Controllers/GreetController.php) sehingga menjadi seperti berikut.

1.	<?php
2.	
3.	namespace App\Http\Controllers;
4.	
5.	use Illuminate\Http\Request;
6.	
7.	class GreetController extends Controller
8.	{
9.	public function greet(\$name)
10.	{

11.	return view('greet', ['name' => \$name]);
12.	}
13.	}

e) View dengan Blade

1. Buat file baru “resources/views/greet.blade.php” dengan isi kode berikut.

1.	< h1>Hello, {{ \$name }}!</h1>
----	--------------------------------

f) Routing

1. Buka file “routes/web.php”. Tambahkan kode berikut.

1.	// ...
2.	use App\Http\Controllers\GreetController;
3.	// ...
4.	Route::get('/hello/{name}', [GreetController::class, 'greet']);

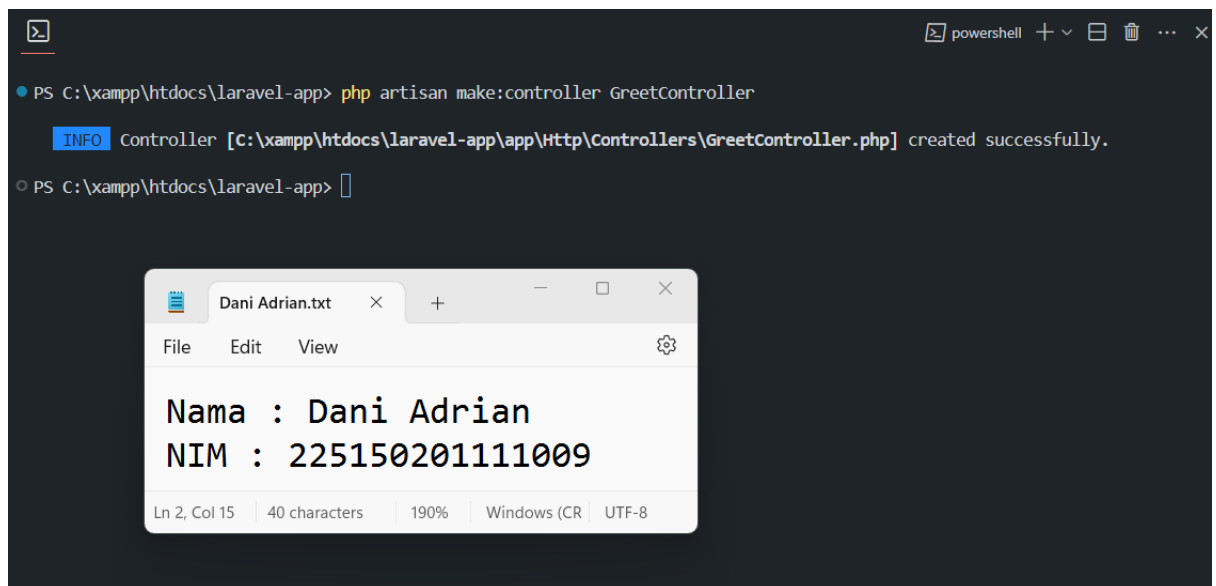
2. Buka URL “http://laravel-app.test/hello/FILKOM” di *browser* dan amati *output* yang dihasilkan.

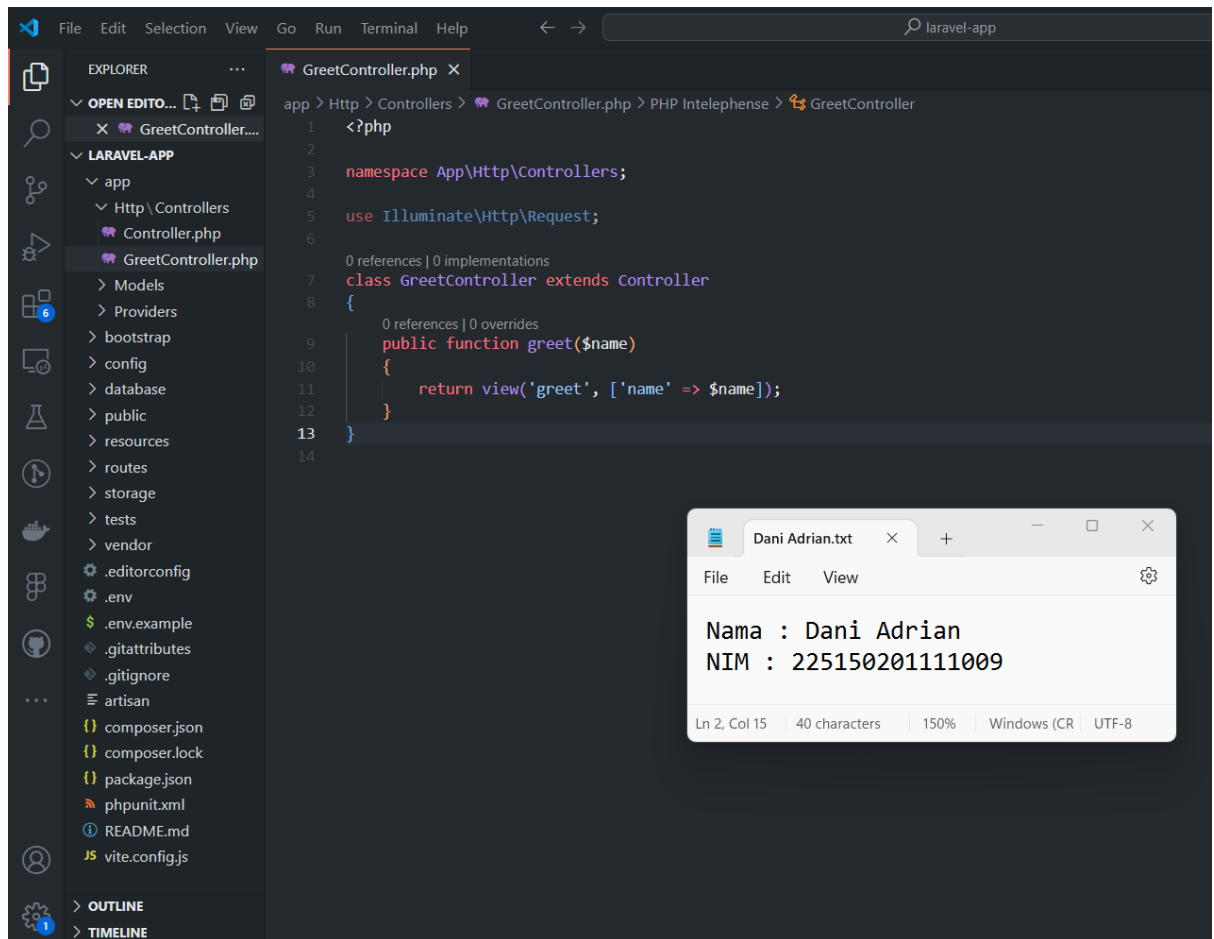
Jelaskan yang dilakukan oleh fungsi `greet()` pada `GreetController`.

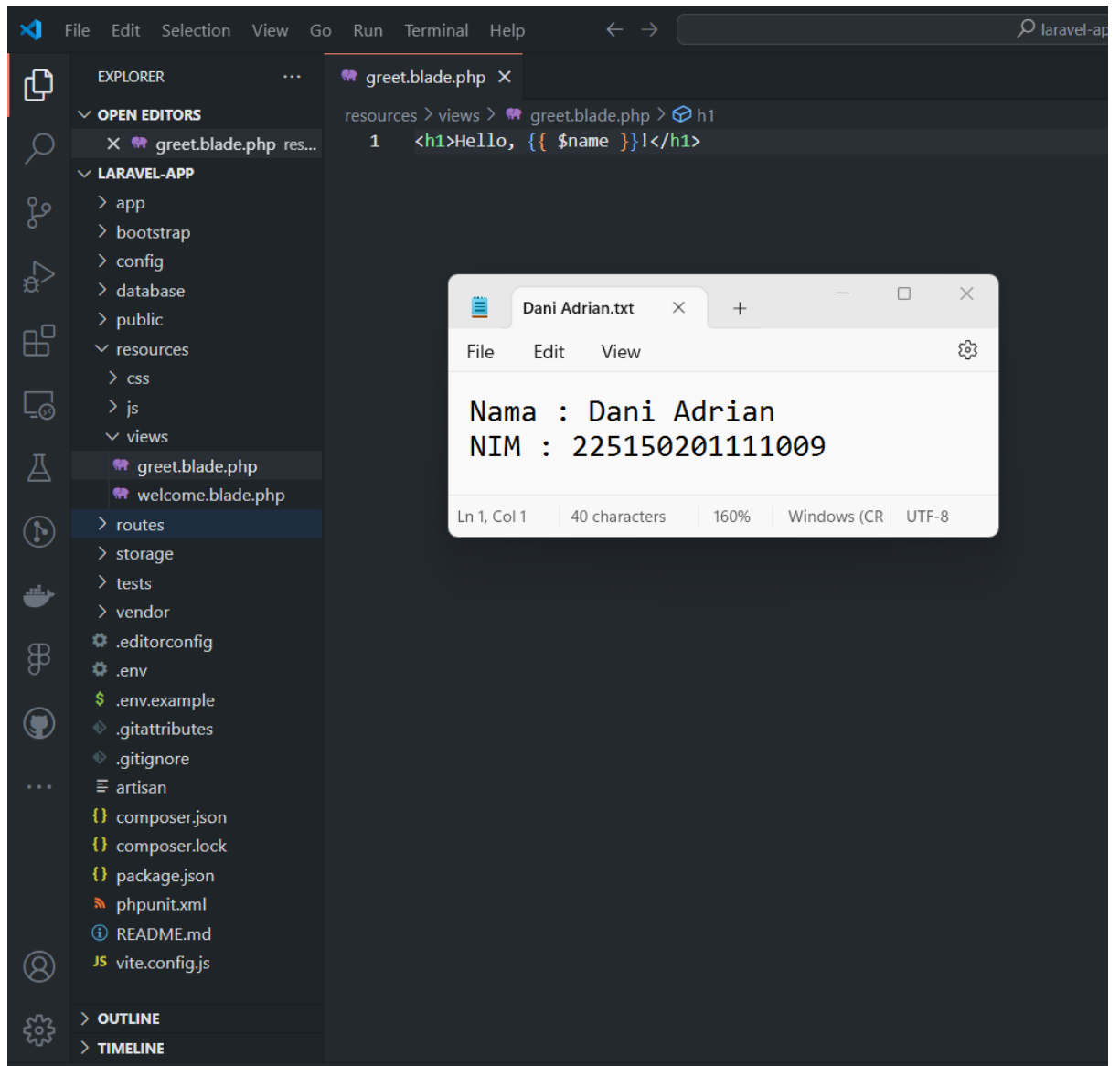
Jelaskan kode yang ditulis pada file “greet.blade.php”.

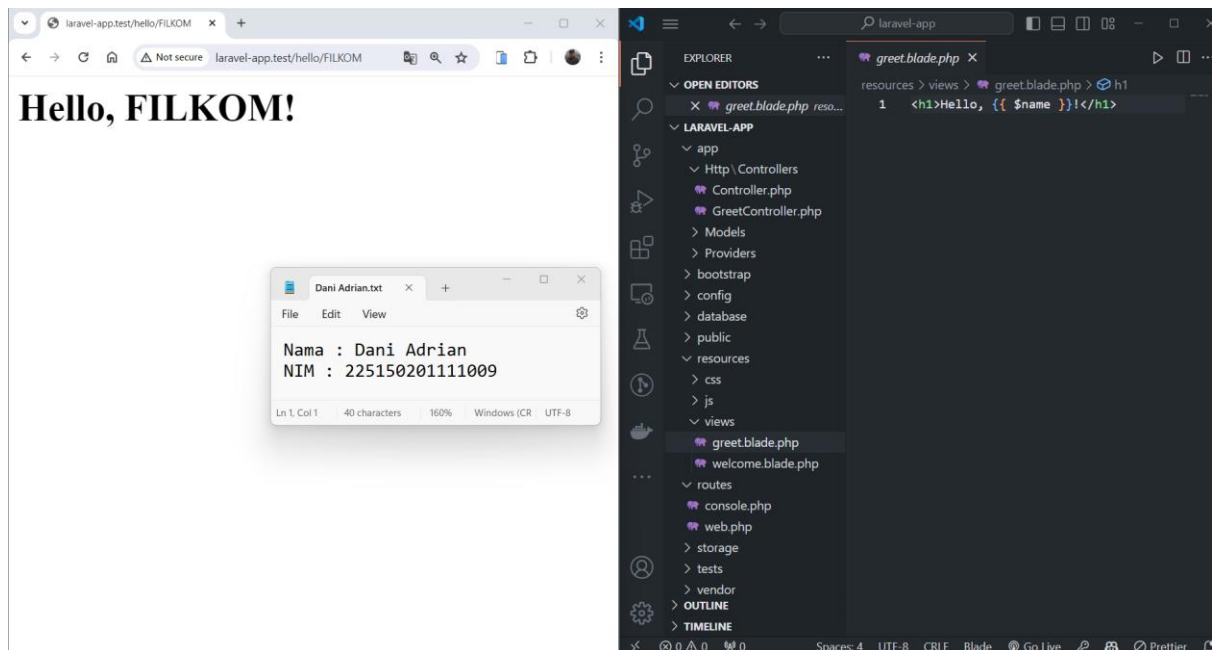
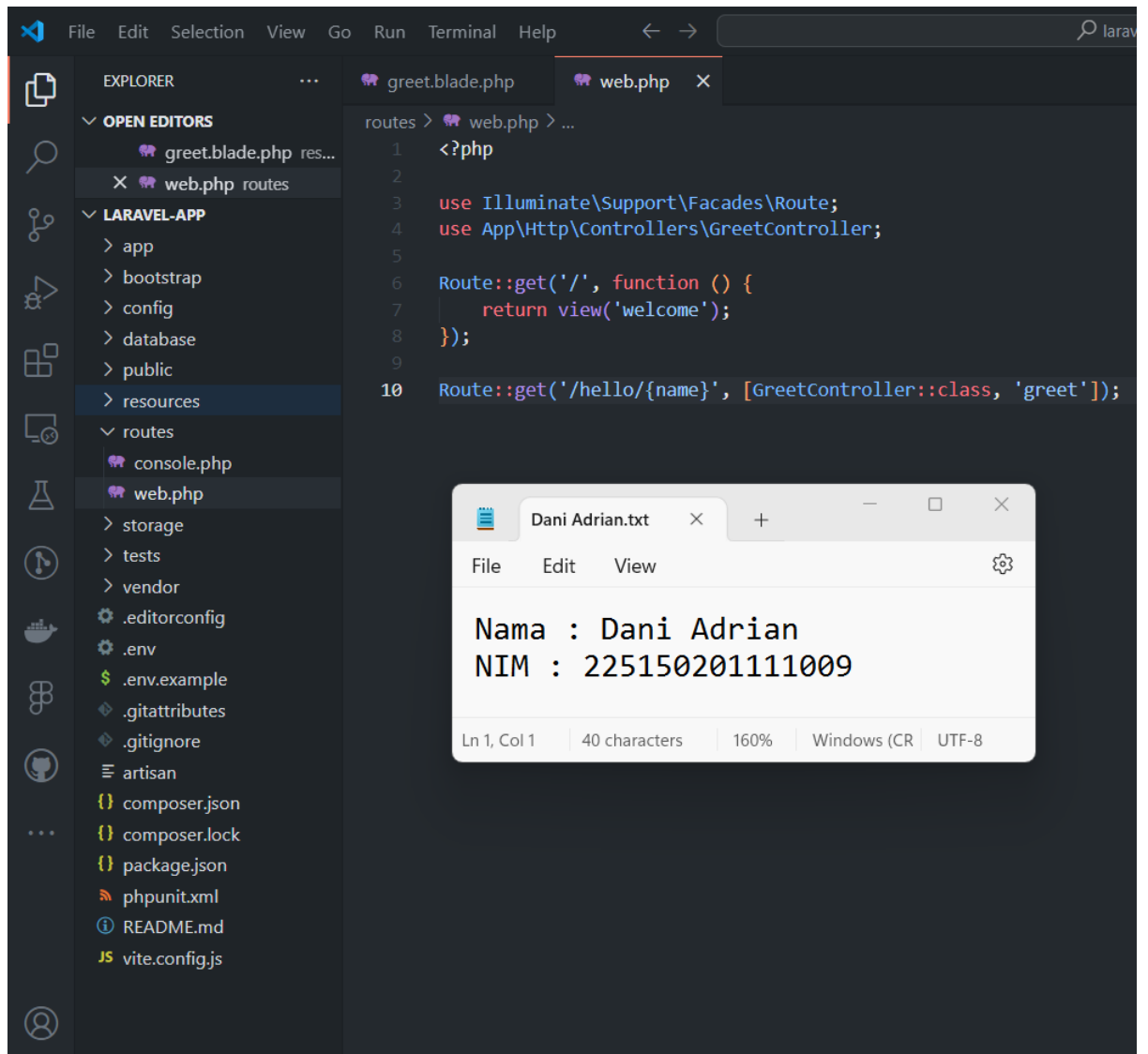
Jelaskan kode yang ditulis pada file “routes/web.php”.

B. Screenshoot









C. Syntax

GreetController.php	
1.	<?php
2.	
3.	namespace App\Http\Controllers;
4.	
5.	use Illuminate\Http\Request;
6.	
7.	class GreetController extends Controller
8.	{
9.	public function greet(\$name)
10.	{
11.	return view('greet', ['name' => \$name]);
12.	}
13.	}

greet.blade.php	
1.	< h1>Hello, {{ \$name }}!</h1>

web.php	
1.	// ...
2.	use App\Http\Controllers\GreetController;
3.	// ...
4.	Route::get('/hello/{name}', [GreetController::class, 'greet']);

D. Penjelasan

Function `greet($name)` pada `GreetController.php` digunakan untuk menampilkan output keluaran sesuai dengan kode pada `greet.blade.php` yaitu `Hello, $name!`. Variabel `name` ini selain digunakan pada `greet.blade.php`, juga digunakan pada pranala yang akan diketik. Contohnya, `laravel-app.test/hello/filkom` yang akan mengeluarkan keluaran `Hello, filkom!`.

`greet.blade.php` digunakan sebagai kode sisipan atau skrip teks yang sebenarnya. `Hello, $name!` sebagai keluaran yang pasti melalui kode `GreetController.php` dan `web.php`.

`web.php` digunakan untuk melakukan rute atau penunjukan pada pranala halaman yang diinginkan. Pada `/hello/{name}`. Maka dengan pranala `laravel-app.test/hello/{name}` akan menjalankan kode pada `GreetController.php` (Penggunaan `use` membantu agar kode pada `GreetController.php` dapat dengan teliti dan mudah ditangkap).

LATIHAN 7

A. Soal

g) Blade template

1. Tambahkan baris berikut pada *file* “routes/web.php”.

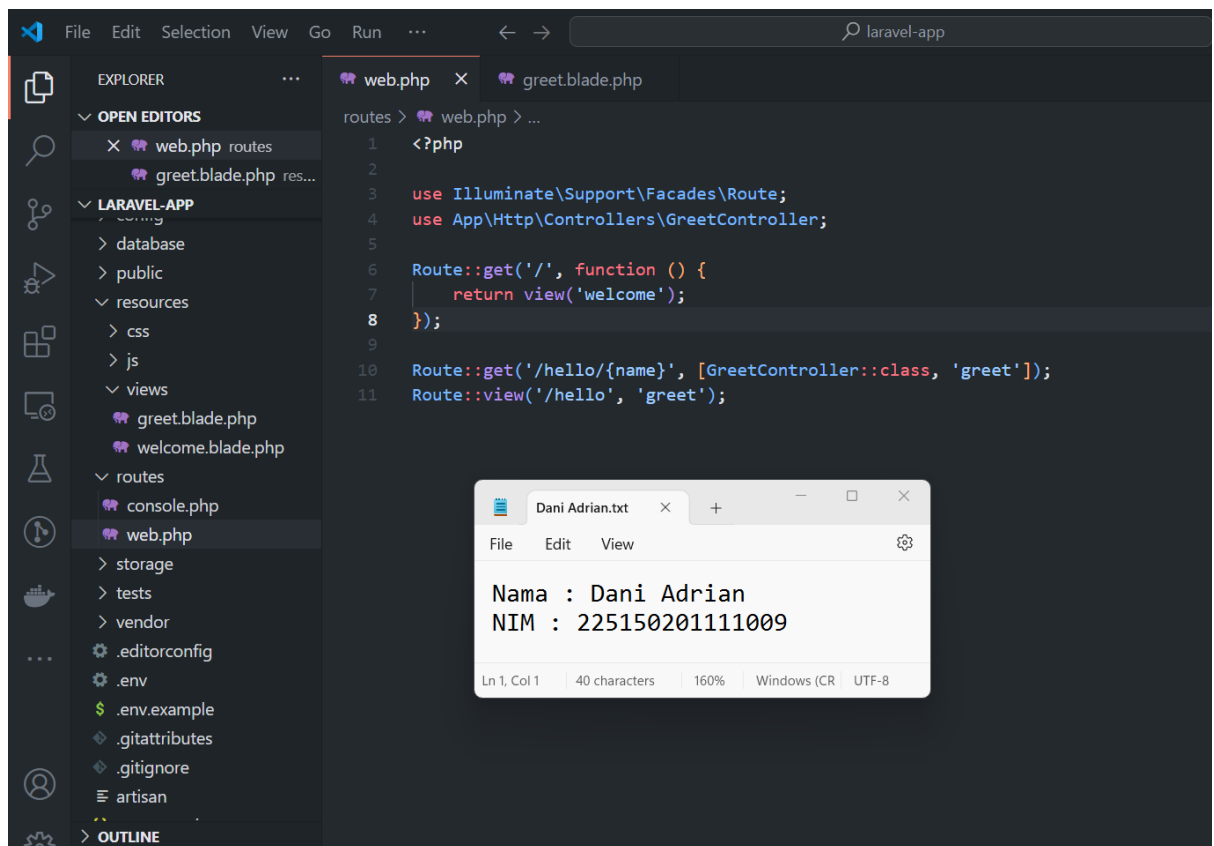
```
1. Route::view('/hello', 'greet');
```

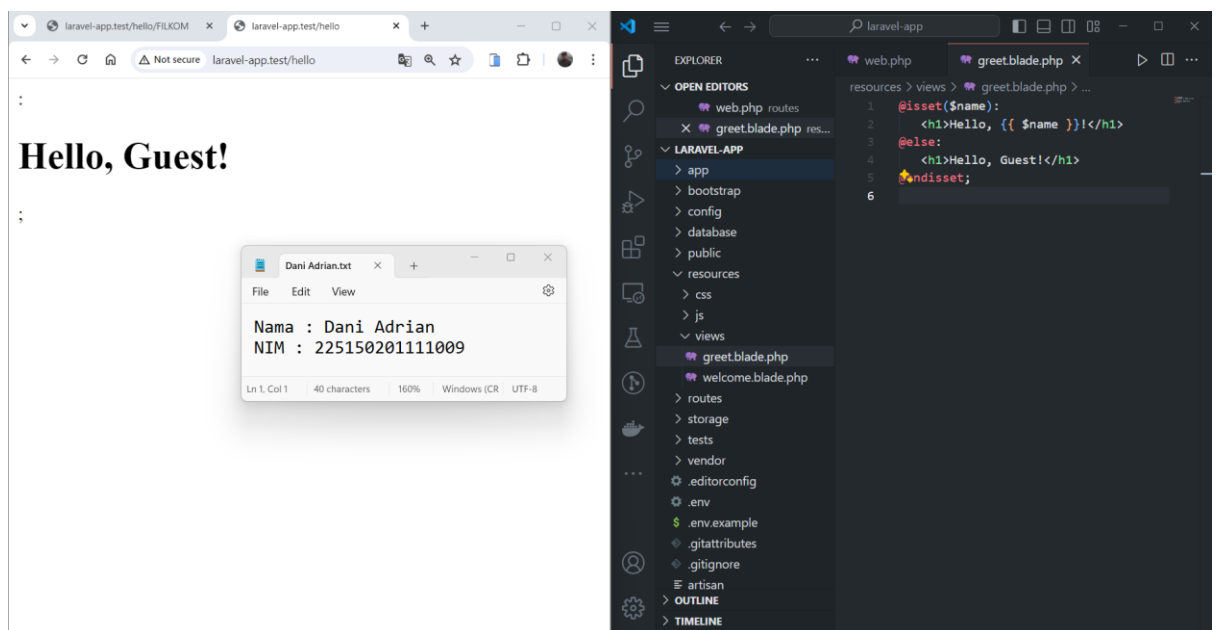
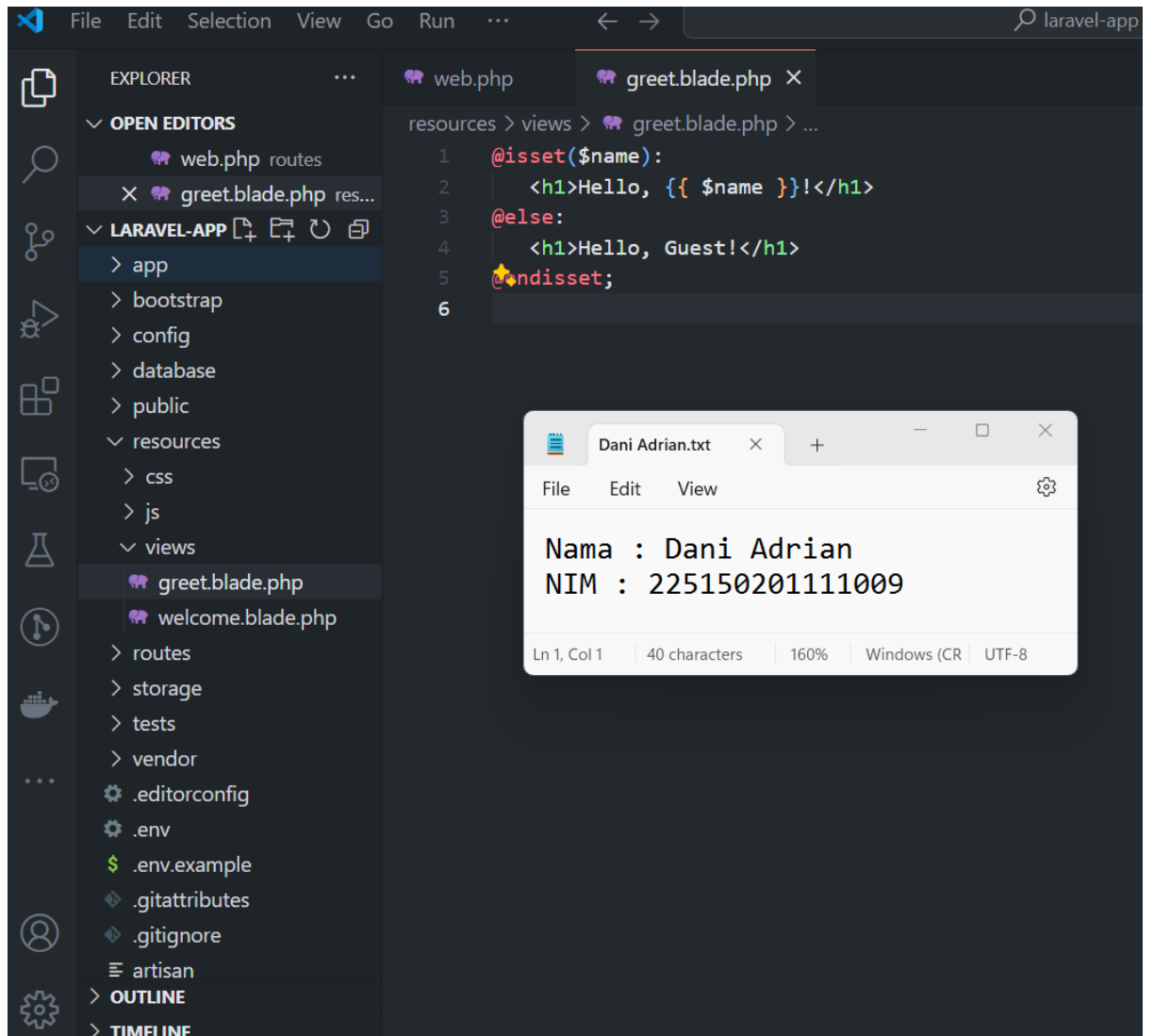
2. Ubah file “greet.blade.php” menjadi seperti berikut.

```
1. @isset($name):  
2.     <h1>Hello, {{ $name }}!</h1>  
3. @else:  
4.     <h1>Hello, Guest!</h1>  
5. @endisset;
```

3. Buka URL “http://laravel-app.test/hello” di *browser*. Jelaskan perubahan yang dibuat pada dua *file* di atas. Bandingkan dengan URL “http://laravel-app.test/hello/FILKOM” yang diakses sebelumnya.

B. Screenshoot





C. Syntax

web.php	
1.	Route::view('/hello', 'greet');

greet.blade.php	
6.	@isset(\$name):
7.	<h1>Hello, {{ \$name }}!</h1>
8.	@else:
9.	<h1>Hello, Guest!</h1>
10.	@endisset;

D. Penjelasan

laravel-app.test/hello dan laravel-app.test/hello/filkom bisa berbeda hanya gara-gara if else pada greet.blade.php. Bila ada variabel name akan mengeluarkan luaran Hello, \$name! dan bila tidak ada variabel name ataupun apapun akan mengeluarkan luaran Hello, Guest!. web.php kemudian menyediakan rute yaitu laravel-app.test/hello (mengoutputkan yang tidak ada variabel namanya) dan laravel-app.test/hello/\$name (mengoutputkan yang ada variabel namanya).