

**TUGAS PRAKTIKUM RPL 03  
UNIT TESTING DENGAN PHPUNIT**



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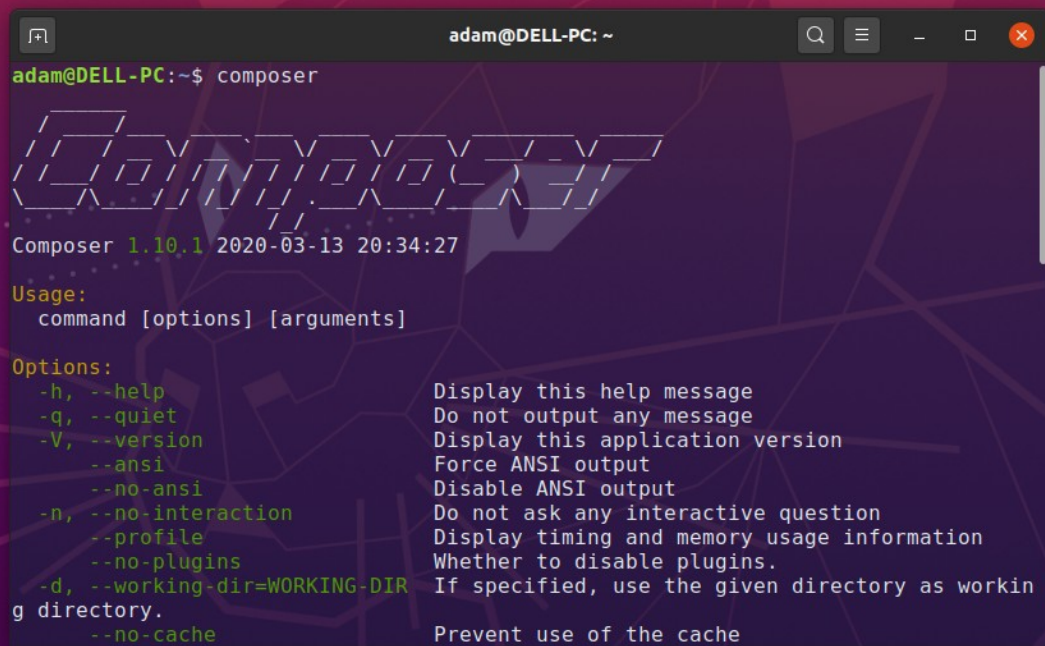
**M3119001**

**TIA**

**PROGRAM STUDI TEKNIK INFORMATIKA  
SEKOLAH VOKASI  
UNIVERSITAS SEBELAS MARET  
SURAKARTA  
2020**

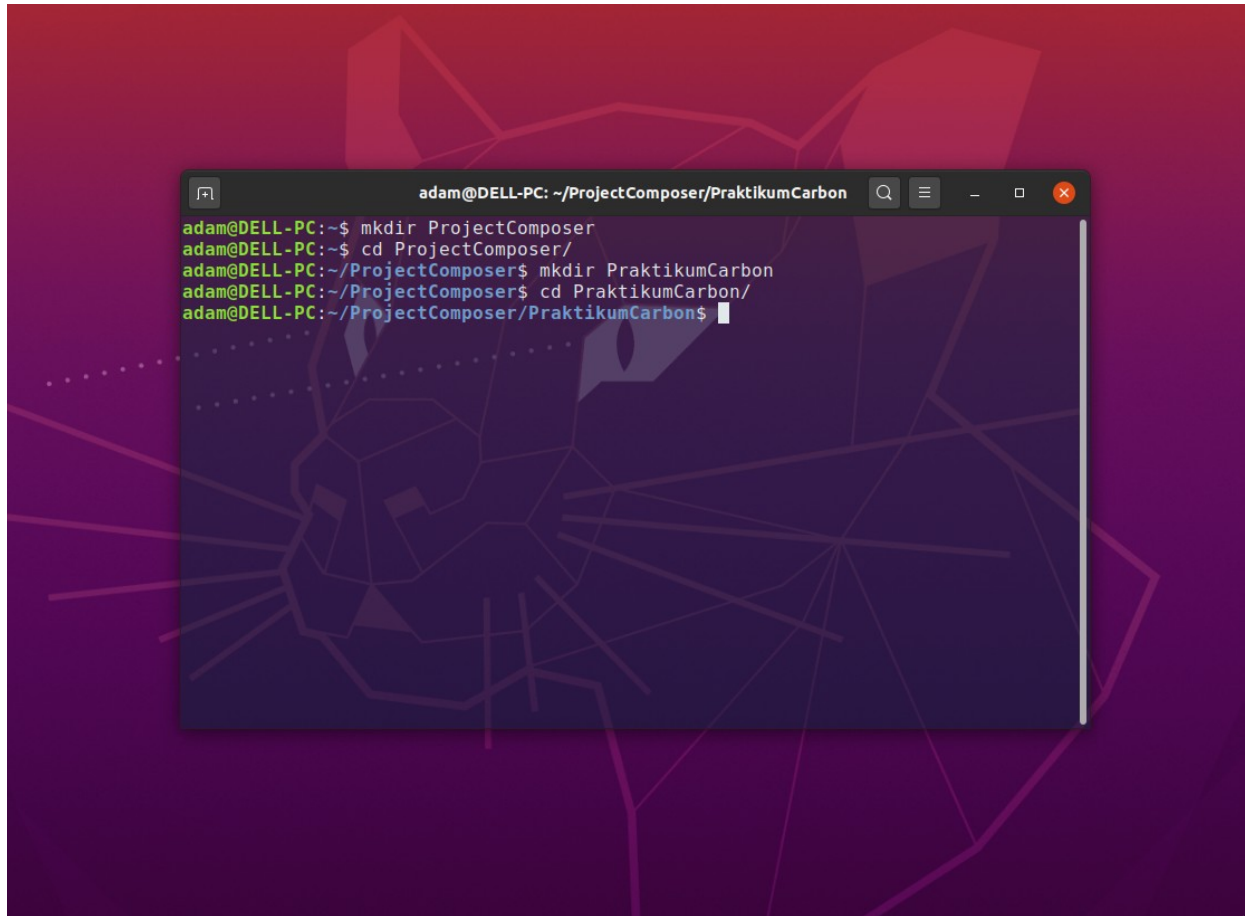
## A. INSTALLASI COMPOSER & PHPUNIT

### 1. Composer



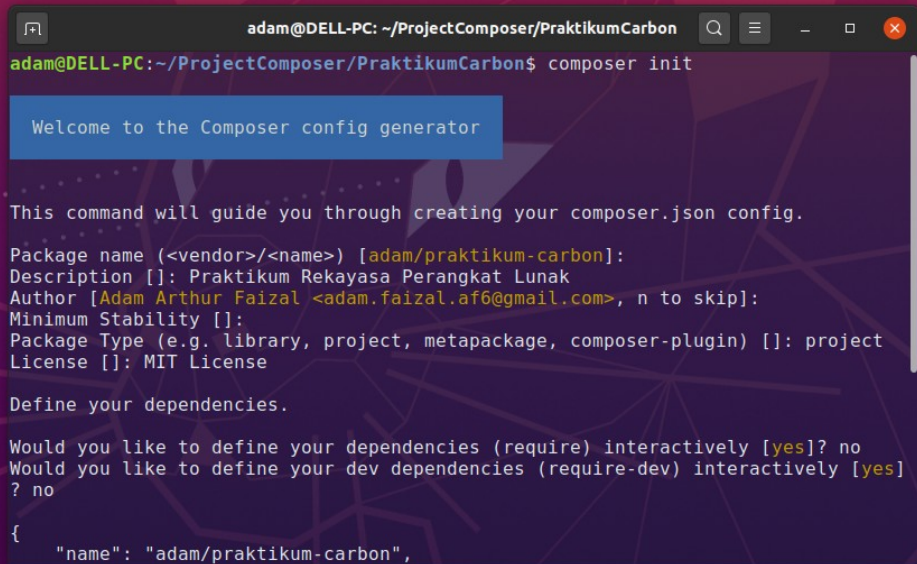
```
adam@DELL-PC: ~  
adam@DELL-PC:~$ composer  
  
Composer 1.10.1 2020-03-13 20:34:27  
  
Usage:  
  command [options] [arguments]  
  
Options:  
  -h, --help                Display this help message  
  -q, --quiet               Do not output any message  
  -V, --version             Display this application version  
  --ansi                   Force ANSI output  
  --no-ansi                Disable ANSI output  
  -n, --no-interaction      Do not ask any interactive question  
  --profile                Display timing and memory usage information  
  --no-plugins              Whether to disable plugins.  
  -d, --working-dir=WORKING-DIR If specified, use the given directory as working directory.  
  --no-cache                Prevent use of the cache
```

2. Membuat direktori untuk menginstall composer dan PHPUnit



```
adam@DELL-PC: ~/ProjectComposer/PraktikumCarbon
adam@DELL-PC:~$ mkdir ProjectComposer
adam@DELL-PC:~$ cd ProjectComposer/
adam@DELL-PC:~/ProjectComposer$ mkdir PraktikumCarbon
adam@DELL-PC:~/ProjectComposer$ cd PraktikumCarbon/
adam@DELL-PC:~/ProjectComposer/PraktikumCarbon$
```

### 3. *composer init*



```
adam@DELL-PC: ~/ProjectComposer/PraktikumCarbon
adam@DELL-PC:~/ProjectComposer/PraktikumCarbon$ composer init

Welcome to the Composer config generator

This command will guide you through creating your composer.json config.

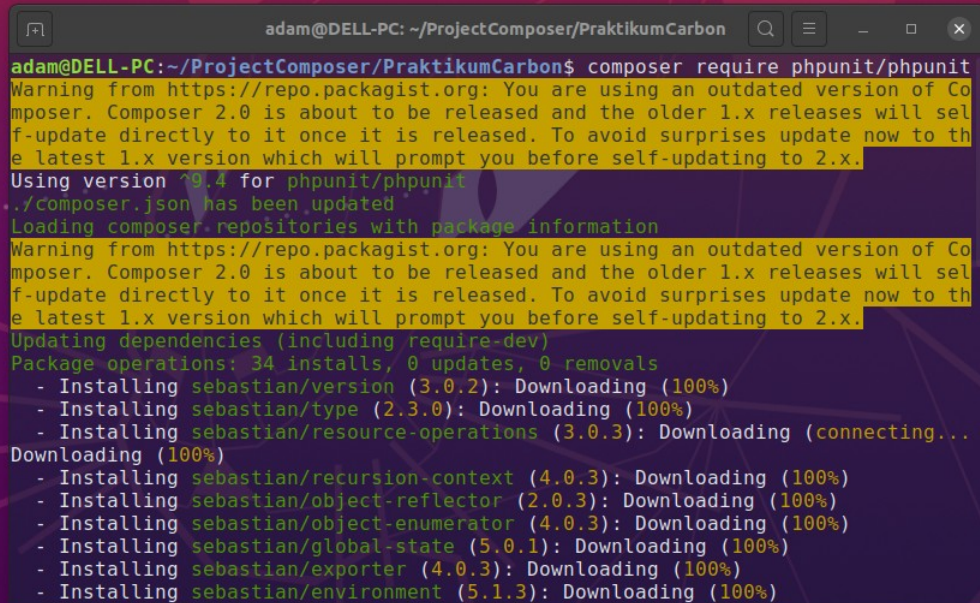
Package name (<vendor>/<name>) [adam/praktikum-carbon]:
Description []: Praktikum Rekayasa Perangkat Lunak
Author [Adam Arthur Faizal <adam.faizal.af6@gmail.com>, n to skip]:
Minimum Stability []:
Package Type (e.g. library, project, metapackage, composer-plugin) []: project
License []: MIT License

Define your dependencies.

Would you like to define your dependencies (require) interactively [yes]? no
Would you like to define your dev dependencies (require-dev) interactively [yes]
? no

{
  "name": "adam/praktikum-carbon",
```

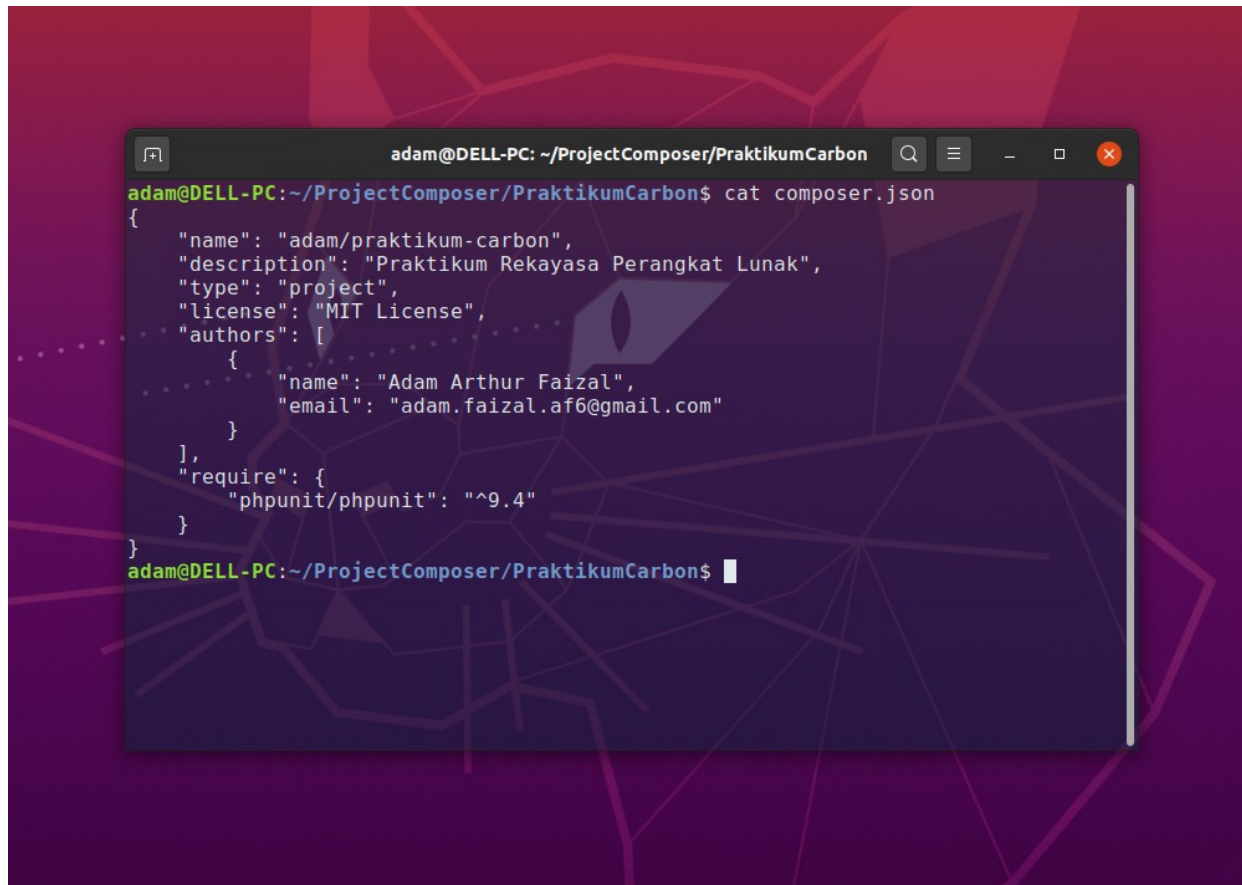
#### 4. *composer require phpunit/phpunit*



```
adam@DELL-PC: ~/ProjectComposer/PraktikumCarbon
adam@DELL-PC:~/ProjectComposer/PraktikumCarbon$ composer require phpunit/phpunit
Warning from https://repo.packagist.org: You are using an outdated version of Co
mposer. Composer 2.0 is about to be released and the older 1.x releases will sel
f-update directly to it once it is released. To avoid surprises update now to th
e latest 1.x version which will prompt you before self-updating to 2.x.
Using version ^9.4 for phpunit/phpunit
./composer.json has been updated
Loading composer repositories with package information
Warning from https://repo.packagist.org: You are using an outdated version of Co
mposer. Composer 2.0 is about to be released and the older 1.x releases will sel
f-update directly to it once it is released. To avoid surprises update now to th
e latest 1.x version which will prompt you before self-updating to 2.x.
Updating dependencies (including require-dev)
Package operations: 34 installs, 0 updates, 0 removals
- Installing sebastian/version (3.0.2): Downloading (100%)
- Installing sebastian/type (2.3.0): Downloading (100%)
- Installing sebastian/resource-operations (3.0.3): Downloading (connecting...
Downloading (100%)
- Installing sebastian/recursion-context (4.0.3): Downloading (100%)
- Installing sebastian/object-reflector (2.0.3): Downloading (100%)
- Installing sebastian/object-enumerator (4.0.3): Downloading (100%)
- Installing sebastian/global-state (5.0.1): Downloading (100%)
- Installing sebastian/exporter (4.0.3): Downloading (100%)
- Installing sebastian/environment (5.1.3): Downloading (100%)
```

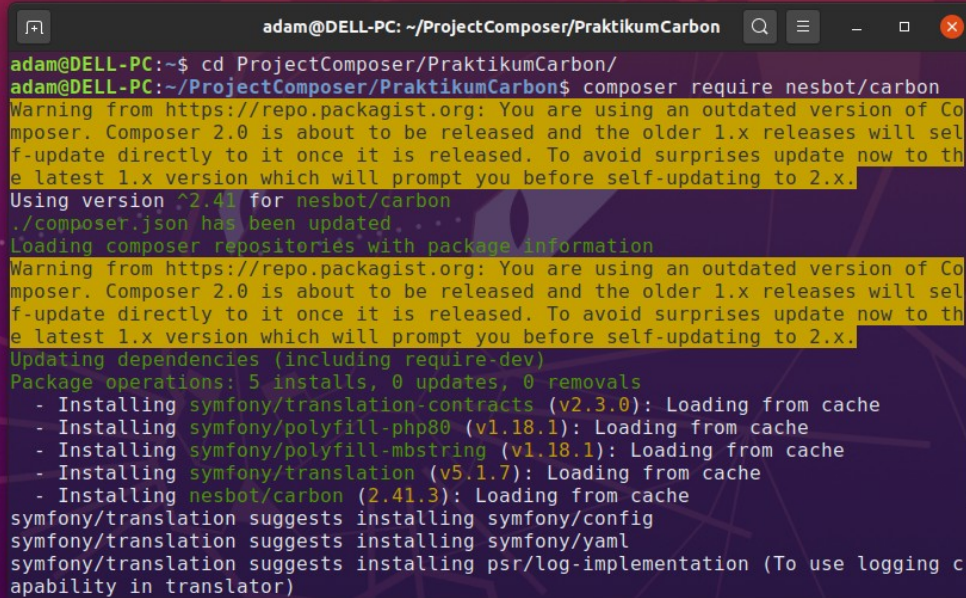


5. Buka file composer.json di folder latihan php unit kemudian screenshot isinya



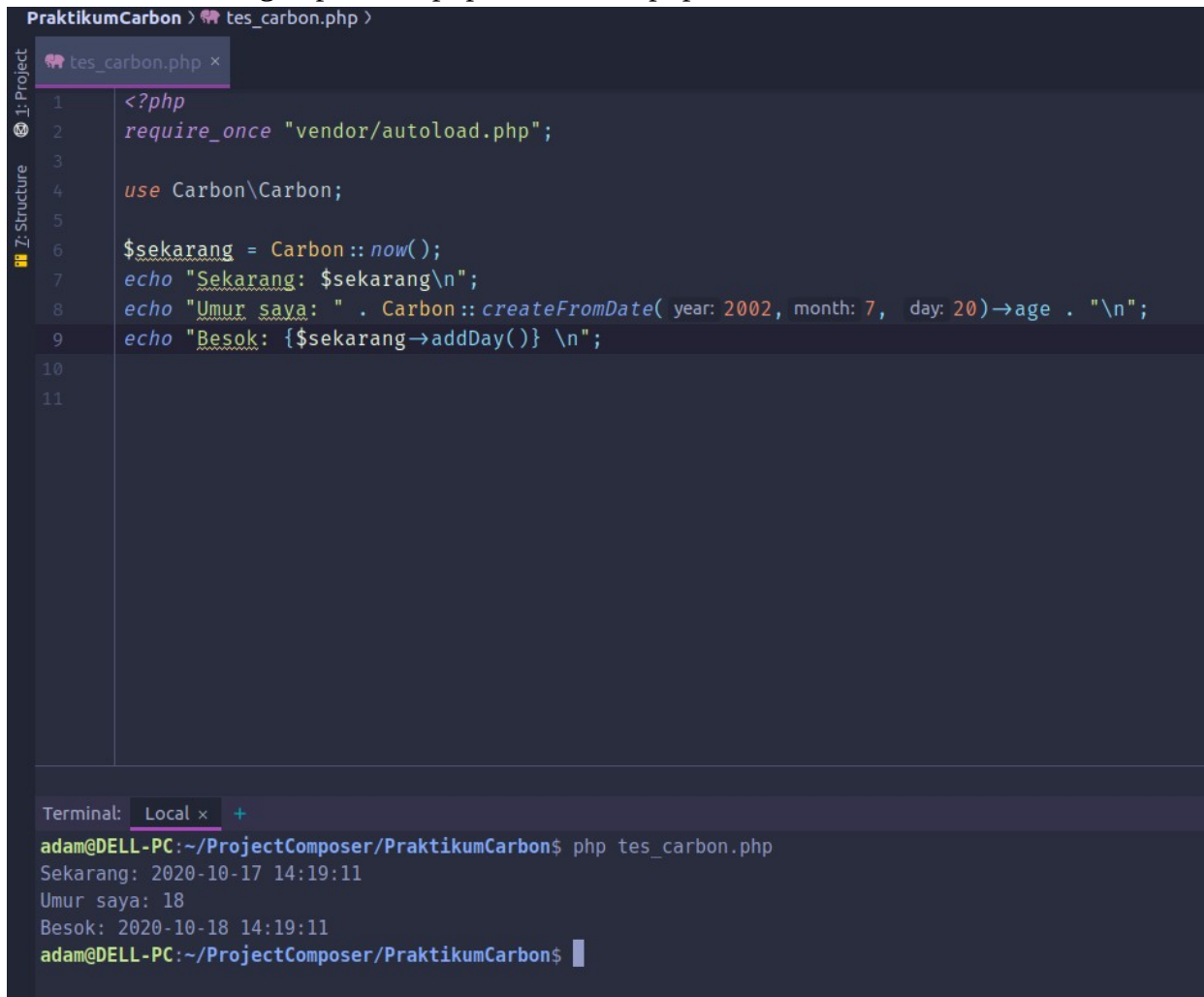
```
adam@DELL-PC: ~/ProjectComposer/PraktikumCarbon
adam@DELL-PC:~/ProjectComposer/PraktikumCarbon$ cat composer.json
{
    "name": "adam/praktikum-carbon",
    "description": "Praktikum Rekayasa Perangkat Lunak",
    "type": "project",
    "license": "MIT License",
    "authors": [
        {
            "name": "Adam Arthur Faizal",
            "email": "adam.faizal.af6@gmail.com"
        }
    ],
    "require": {
        "phpunit/phpunit": "^9.4"
    }
}
adam@DELL-PC:~/ProjectComposer/PraktikumCarbon$
```

6. Selanjutnya cobalah install library Carbon, library ini menyediakan fungsi-fungsi untuk pemrosesan waktu (date time).



```
adam@DELL-PC: ~/ProjectComposer/PraktikumCarbon
adam@DELL-PC:~/ProjectComposer/PraktikumCarbon$ composer require nesbot/carbon
Warning from https://repo.packagist.org: You are using an outdated version of Co
mposer. Composer 2.0 is about to be released and the older 1.x releases will sel
f-update directly to it once it is released. To avoid surprises update now to th
e latest 1.x version which will prompt you before self-updating to 2.x.
Using version ^2.41 for nesbot/carbon
./composer.json has been updated
Loading composer repositories with package information
Warning from https://repo.packagist.org: You are using an outdated version of Co
mposer. Composer 2.0 is about to be released and the older 1.x releases will sel
f-update directly to it once it is released. To avoid surprises update now to th
e latest 1.x version which will prompt you before self-updating to 2.x.
Updating dependencies (including require-dev)
Package operations: 5 installs, 0 updates, 0 removals
- Installing symfony/translation-contracts (v2.3.0): Loading from cache
- Installing symfony/polyfill-php80 (v1.18.1): Loading from cache
- Installing symfony/polyfill-mbstring (v1.18.1): Loading from cache
- Installing symfony/translation (v5.1.7): Loading from cache
- Installing nesbot/carbon (2.41.3): Loading from cache
symfony/translation suggests installing symfony/config
symfony/translation suggests installing symfony/yaml
symfony/translation suggests installing psr/log-implementation (To use logging c
apability in translator)
```

7. Buatlah file PHP baru bernama tes\_carbon.php dengan isi sebagai berikut, kemudian dieksekusi dengan perintah *php tes\_carbon.php*



```
PraktikumCarbon > tes_carbon.php >
tes_carbon.php x
1 <?php
2 require_once "vendor/autoload.php";
3
4 use Carbon\Carbon;
5
6 $sekarang = Carbon::now();
7 echo "Sekarang: $sekarang\n";
8 echo "Umur saya: " . Carbon::createFromDate( year: 2002, month: 7, day: 20)→age . "\n";
9 echo "Besok: {$sekarang→addDay()} \n";
10
11

Terminal: Local x +
adam@DELL-PC:~/ProjectComposer/PraktikumCarbon$ php tes_carbon.php
Sekarang: 2020-10-17 14:19:11
Umur saya: 18
Besok: 2020-10-18 14:19:11
adam@DELL-PC:~/ProjectComposer/PraktikumCarbon$
```