INTERVIEW QUESTION-ANSWERS OF LARAVEL

1. What is Larayel?

ANS:- Laravel is an open-source PHP framework based on the Model-View-Controller (MVC) architecture. It simplifies web development by providing tools and features like routing, middleware, Eloquent ORM, and Blade templating.

2. What are some key features of Laravel?

ANS:-

- MVC Architecture
- Eloquent ORM
- Blade Templating Engine
- Routing and Middleware
- Routing and MiddlewareTask Scheduling (Scheduler)
- Authentication and Authorization
- Artisan CLI
- Artisan CLI
 Database Migrations and Seeding

3. What is Artisan in Laravel?

ANS:- Artisan is Laravel's command-line interface (CLI) used to perform repetitive tasks like creating controllers, running migrations, and seeding databases. For example:

php artisan make:controller ExampleController

4. Explain Middleware in Laravel.

ANS:- Middleware acts as a bridge between a request and response. It's used for filtering HTTP requests. For example, Laravel includes middleware for authentication (auth) and CSRF protection.

5. How does Laravel handle security?

ANS:- Laravel provides built-in security features, including:

- CSRF protection (@csrf token in forms)
- Password hashing (using bcrypt or Argon2)
- SQL injection prevention (via Eloquent ORM)
- Cross-Site Scripting (XSS) prevention

6. What is a Service Provider in Laravel?

ANS:- Service Providers are the central place of application bootstrapping. They register services, configurations, and bindings in the service container. The AppServiceProvider is an example of a default service provider.

7. What are Laravel's default directories?

ANS:-

- app/: Contains application logic (controllers, models, etc.)
- routes/: Contains route definitions.
- resources/: Contains views, raw assets, and language files.
- database/: Contains migrations, factories, and seeds.
- **public/**: Web-accessible files like assets (CSS, JS).

8. What is the difference between get(), first(), and find() in Eloquent?

ANS:-

- get (): Retrieves all records as a collection.
- first(): Retrieves the first record matching the query.
- find(): Finds a record by its primary key.

9. How do you create a RESTful API in Laravel?

ANS:-

- Create a controller using php artisan make:controller.
- Use the apiResource route:
- Route::apiResource('posts', PostController::class);
- Implement CRUD methods in the controller.

10. What are Laravel Events?

ANS:- Events in Laravel provide a way to notify parts of an application when specific actions occur. Events are defined and dispatched, and listeners handle the event.

11. What is Dependency Injection in Laravel?

ANS:- Dependency Injection is a design pattern Laravel uses to inject class dependencies into the constructor or method.

Example:

```
public function construct(UserRepository $userRepo)
```

```
{
    $this->userRepo = $userRepo;
}
```

12. What is a Repository Pattern in Laravel?

ANS:- The Repository Pattern separates business logic from data access, making the code more testable and maintainable.

