

Top 50 one-liner interview Q&A for PHP + Laravel (25 + 25):

PHP (1–25)

1. What is PHP? – A server-side scripting language mainly used to build dynamic web applications.
2. What is Composer? – PHP's dependency manager that installs packages and handles autoloading.
3. Difference between echo and print? – echo is faster and can output multiple values; print returns 1.
4. Difference between == and ===? – == compares values; === compares value + type.
5. What is var_dump() used for? – It prints detailed variable info including type and length.
6. What are PHP data types? – int, float, string, bool, array, object, null, resource.
7. What is variable scope in PHP? – Determines where a variable is accessible (local/global/static).
8. How do you declare constants? – Use const or define() for values that shouldn't change.
9. Indexed vs associative arrays? – Indexed use numeric keys; associative use named keys.
10. Pass by value vs pass by reference? – By value copies data; by reference (&) modifies original.
11. include vs require? – require stops shows fatal error if missing; include only warns and continues.
12. includeonce / requireonce? – Ensures a file is included only once to avoid redeclaration errors.
13. What are superglobals? – Built-in arrays like `$GET`, `$POST`, `$SERVER`, `$SESSION`, etc.
14. How do you validate/sanitize input? – Use filter_var(), strict validation rules, and whitelist patterns.
15. What is SQL Injection and how to prevent it? – Malicious SQL via inputs; prevent with prepared statements.

16. What is PDO? – A database abstraction layer that supports prepared statements and multiple DB drivers.
17. What is XSS and prevention? – Injecting scripts into pages; prevent by escaping output (e.g., `htmlspecialchars`).
18. What is CSRF and prevention? – Forged requests from another site; prevent via CSRF tokens.
19. Session vs cookie? – Session data stored server-side; cookies stored on client-side.
20. What is `header()` used for? – Sends HTTP headers (redirects, content-type, cache control).
21. What is output buffering? – Capturing output before sending to browser using `obstart()` / `ob_get_clean()`.
22. What are magic methods? – Special methods like `construct`, `destruct`, `get`, `set`, etc.
23. Abstract class vs interface? – Abstract can have implemented methods/state; interface defines a contract only.
24. What are traits? – Reusable method groups to share code across classes without inheritance limits.
25. PHP 8+ union types and nullsafe operator? – Union types allow multiple types (`int|string`), `?->` avoids null errors in chaining.

Laravel (26–50)

26. What is Laravel? – A PHP framework for building web apps using MVC, routing, and modern tooling.
27. What is MVC in Laravel? – Model handles data, View handles UI, Controller handles logic/requests.
28. What is Artisan? – Laravel's CLI tool for generating code, running migrations, caches, queues, etc.
29. What is the `.env` file? – Stores environment-specific settings like DB credentials and API keys.

30. What is routing in Laravel? – Mapping URLs to controllers/closures, defined in web.php and api.php.

31. Named routes? – Routes with names used for cleaner URL generation and redirects.

32. What is middleware? – A request filter layer (auth, role checks, throttling) before controllers run.

33. What is Blade? – Laravel's templating engine with directives like @if, @foreach, @extends.

34. What is Eloquent? – Laravel's ORM for working with database tables as PHP models.

35. What are Eloquent relationships? – Model links like hasOne, hasMany, belongsTo, belongsToMany.

36. What is mass assignment? – Bulk assigning attributes; controlled by \$fillable or \$guarded.

37. What are migrations? – Version-controlled schema changes using PHP files.

38. Seeders and factories? – Seeders insert data; factories generate fake test data (often via Faker).

39. Query Builder vs Eloquent? – Builder is SQL-like fluent queries; Eloquent is model-based ORM.

40. What is validation in Laravel? – Rule-based input checks using validate() or Validator/Form Requests.

41. What is a Form Request? – A dedicated class to handle validation + authorization cleanly.

42. What is CSRF protection in Laravel? – Laravel auto-verifies CSRF tokens on web forms.

43. What is the N+1 problem? – Too many DB queries due to lazy-loaded relationships.

44. What is eager loading? – Preloads relations using with() to reduce queries.

45. What are query scopes? – Reusable query filters defined in the model (local/global scopes).

46. What is soft delete? – Marks records deleted via deleted_at without removing them

permanently.

47. Events and listeners? – Decoupled communication where events trigger listener actions.

48. Queues and Jobs? – Background processing for slow tasks (emails, exports) via workers.

49. Task scheduling? – `app/Console/Kernel.php` schedules jobs/commands (cron-like).

50. How to optimize Laravel performance? – Use caching, eager loading, indexes, `config:cache`, `route:cache`, and queues.