

Backend Web Technologies & Frameworks

1. Which of the following data types is not supported in PHP?

- A. String
- B. Character
- C. Array
- D. Object

ANSWER: B

2. In a form, if you need to group multiple elements that belong together, which HTML tag can be used?

- A. <group>
- B. <fieldset>
- C. <div>
- D. <section>

ANSWER: B

3. How do you write comments in PHP?

- A. Using #
- B. Using // for single line and /* */ for multiple lines
- C. Using **
- D. Using

ANSWER: B

4. Which superglobal array in PHP contains information about headers, paths, and script locations?

- A. \$_POST
- B. \$_SERVER
- C. \$_GET
- D. \$_FILES

ANSWER: B

5. Which of the following is a correct PHP tag?

- A. <?php ... ?>
- B. <script> ... </script>
- C. <php> ... </php>
- D. <% %>

ANSWER: A

6. What method should be used to send sensitive data in a form?

- A. DELETE
- B. POST
- C. GET
- D. PUT

ANSWER: B

7. Find the output of the following PHP code?

```
$x = "Hello";  
$y = 'India';  
echo $x . " " . $y;  
?>
```

- A. Hello+India
- B. HelloIndia
- C. Hello India
- D. Error

ANSWER: C

8. Consider the PHP array:

```
$arr = array(10, 20, 30, 40);
```

What is the correct way to access the third element?

- A. \$arr(2)
- B. \$arr[3]
- C. \$arr[2]
- D. \$arr(3)

ANSWER: C

9. In PHP, which character is used at the end of each statement?

- A. ,
- B. ;
- C. :
- D. .

ANSWER: B

10. Spot the error in the following PHP code:

```
for ($i = 0; $i <= 5; $i++) {  
    echo $i; } echo $i;  
?>
```

- A. Syntax error in loop
- B. No error in the code
- C. Missing semicolon
- D. Undefined variable outside loop

ANSWER: D

11. PHP can be embedded in which of the following types of documents?

- A. HTML only
- B. JavaScript only
- C. HTML, CSS, and JavaScript
- D. CSS only

ANSWER: C

12. Composer is a tool for _____ in PHP.

- A. Configuration
- B. Dependency management
- C. Interpolation
- D. None of the above

ANSWER: B

13. Which command is used to create migrations in Laravel?

- A. php artisan make:migration create_users_table
- B. php artisan make:migrate create_users_table
- C. php artisan migration create_users_table
- D. none

ANSWER: A

14. What is the name of the ORM used in Laravel?

- A. Composer
- B. Artisan
- C. Eloquent
- D. Hibernate

ANSWER: C

15. Which class is used in Laravel to handle exceptions?

- A. App\Exception\Handler
- B. App\Exceptions\Handle
- C. App\Exceptions\Handler
- D. None of above

ANSWER: C

16. Where is the routing file located in Laravel?

- A. app/Http/
- B. urls/
- C. vendors/
- D. routes/

ANSWER: D

17. How to check current laravel version installed on your system?

- A. php artisan make --version
- B. php artisan --version
- C. php artisan check --version
- D. none of the above

ANSWER: B

18. What does ORM stands for in Laravel?

- A. overloaded-relational Mapping
- B. object-relational Mapping
- C. object-related Modifier
- D. object-Rotational Mechanisim

ANSWER: B

19. ____ installed on your system before you install Laravel.

- A. Composer
- B. Browser
- C. Eloquent
- D. None of the above

ANSWER: A

20. All dependencies are specified in the ____ file, which is located in the source folder?

- A. composer.json
- B. Root
- C. Config
- D. None of the above

ANSWER: A

21. Which template language does Laravel use?

- A. Command Bus
- B. Blade
- C. Cron
- D. Template engine

ANSWER: B

22. Laravel is ____ framework?

- A. Frontend
- B. Backend

ANSWER: B

23. Where do we need to set database connection in Laravel?

- A. Setting.php
- B. Config.php
- C. .ENV file
- D. In seed files

ANSWER: C

24. When was Laravel first released?

- A. June 2011
- B. June 2007
- C. June 2009
- D. None

ANSWER: A

25. Command line interface used in Laravel is called ____.

- A. CLI
- B. Command Prompt
- C. Artisan
- D. Composer

ANSWER: C

26. Which of the following statement is true?

- A. Both TRUNCATE and DELETE statements do not free the table's space.
- B. TRUNCATE frees the table space while DELETE does not.
- C. DELETE frees the table space while TRUNCATE does not.
- D. Both TRUNCATE and DELETE statements free the table's space.

ANSWER: B

27. Which operator is used to compare a value to a specified list of values?

- A. ALL
- B. BETWEEN
- C. IN
- D. ANY

ANSWER: C

28. SQL Views are also known as

- A. Virtual tables
- B. Simple tables
- C. Actual Tables
- D. Complex tables

ANSWER: A

29. What is returned by INSTR ('INDIAN FLAG', 'F')?

- A. 6
- B. FLAG
- C. 7
- D. INDIAN

ANSWER: C

30. Which data manipulation command is used to combine the records from one or more tables?

- A. SELECT
- B. PROJECT
- C. PRODUCT
- D. JOIN

ANSWER: D

31. Which datatype can store unstructured data in a column?

- A. CHAR
- B. RAW
- C. NUMERIC
- D. VARCHAR

ANSWER: B

32. Which of the following is not a valid SQL type?

- A. DECIMAL
- B. NUMERIC
- C. CHARACTER
- D. FLOAT

ANSWER: C

33. In which of the following cases a DML statement is not executed?

- A. When some rows are deleted.
- B. None of the them
- C. When existing rows are modified.
- D. When a table is deleted.

ANSWER: D

34. Which statement is used to delete all rows in a table without having the action logged?

- A. REMOVE
- B. DELETE
- C. TRUNCATE
- D. DROP

ANSWER: C

35. Which operator tests a column for absence of data?

- A. NOT Operator
- B. Exists Operator
- C. IS NULL Operator
- D. None of the above

ANSWER: C

36. If we have not specified ASC or DESC after a SQL ORDER BY clause, the following is used by default

- A. DESC
- B. None of the mentioned
- C. There is no default value
- D. ASC

ANSWER: D

37. What is the full form of SQL?

- A. Sample Query Language
- B. Structured Query List
- C. Structure Query Language
- D. None of these

ANSWER: C

38. How many Primary keys can have in a table?

- A. Only 1
- B. Depends on no of Columns
- C. Depends on DBA
- D. Only 2

ANSWER: A

39. Which of the following is not Constraint in SQL?

- A. Primary Key
- B. Union
- C. Not Null
- D. Check

ANSWER: B

40. Which of the following is not a DDL command?

- A. UPDATE
- B. TRUNCATE
- C. ALTER
- D. CREATE

ANSWER: A

41. Which of the following is not a valid aggregate function?

- A. COMPUTE
- B. SUM
- C. COUNT
- D. MAX

ANSWER: A

42. Which of the following are TCL commands?

- A. SELECT and INSERT
- B. GRANT and REVOKE
- C. UPDATE and TRUNCATE
- D. COMMIT and ROLLBACK

ANSWER: D

43. How does MongoDB ensure data consistency?

- A. Through transactions and ACID compliance
- B. By using eventual consistency
- C. With document locking
- D. Through replication and write concerns

ANSWER: D

44. Which of the following best describes MongoDB's approach to schemas?

- A. Rigid and predefined
- B. Flexible and dynamic
- C. Fixed and unchangeable
- D. None, as MongoDB does not use schemas

ANSWER: B

45. How does MongoDB handle relationships between data?

- A. Through embedded documents and references
- B. By using foreign keys and joins
- C. With indexes and links
- D. By utilizing graph structures

ANSWER: A

46. What type of data model does MongoDB use?

- A. Document model
- B. Graph model
- C. Relational model
- D. Key-value model

ANSWER: A

47. Which of the following code snippets demonstrates the creation of a MongoClient object for a collection named "FirstCollection" in the "mydb" database?

- A. MongoClient<Document> collection = db.getCollection(FirstCollection);
- B. MongoClient collection = db.getCollection(FirstCollection);
- C. MongoClient<Document> collection = db.collection(FirstCollection);
- D. MongoClient<Document> collection = db.get("FirstCollection");

ANSWER: A

48. How does MongoDB handle schema design?

- A. With a rigid schema defined upfront
- B. Through a flexible schema that can evolve over time
- C. By dynamically creating a schema based on data
- D. With a user-defined schema for each collection

ANSWER: B

49. What is a collection in MongoDB?

- A. A set of documents with similar structure
- B. A grouping of related tables
- C. A database index
- D. A unique identifier for a document

ANSWER: A

50. How does MongoDB handle data replication?

- A. With asynchronous replication
- B. Through master-slave replication
- C. By using multi-master replication
- D. All of the above

ANSWER: D

51. What is MongoDB Atlas?

- A. A cloud-based database-as-a-service platform for MongoDB
- B. A command-line interface for interacting with MongoDB
- C. A set of development tools for building MongoDB applications
- D. A graphical user interface tool for managing MongoDB

ANSWER: A

52. How will you define MongoDB?

- A. A relational database management system
- B. A graph database
- C. A document-oriented NoSQL database
- D. An object-oriented database

ANSWER: C

53. Which of the following code snippets is used to connect to a MongoDB database named "mydb" on a local host using the MongoClient class?

- A. MongoClient client = new MongoClient("localhost:27017"); MongoDBDatabase db = client.getDatabase("mydb");
- B. MongoClientURI uri = new MongoClientURI("mongodb://localhost:27017/mydb");
MongoClient client = new MongoClient(uri);
MongoDatabase db = client.getDatabase("mydb");
- C. MongoClient client = new MongoClient("localhost", "mydb");
MongoDatabase db = client.getDatabase();
- D. MongoClient client = new MongoClient("localhost", 27017); MongoDBDatabase db = client.getDatabase("mydb");

ANSWER: B

54. Define sharding in MongoDB?

- A. Distributing data across multiple machines for scalability
- B. A process of optimizing query performance
- C. A method for securing data with encryption
- D. A technique for data compression

ANSWER: A

55. What is the role of the MongoDB Query Language (MQL)?

- A. To perform complex queries and aggregations
- B. To define indexes and optimize query performance
- C. To manage security and access control
- D. To handle data replication and sharding

ANSWER: A

56. What is a replica set in MongoDB?

- A. A group of MongoDB instances that hold the same data set
- B. A security feature that encrypts data at rest
- C. A configuration for sharding data across multiple machines
- D. A set of indexes used for optimizing query performance

ANSWER: A

57. How does MongoDB handle data indexing?

- A. Through unique indexes on primary keys
- B. By allowing custom indexes on any field or combination of fields
- C. With automatically generated indexes for frequently queried fields
- D. All of the above

ANSWER: B

58. How to check if a form has been submitted in PHP?

- A. Checking if `$_POST` is set
- B. Checking if `$_REQUEST` is set
- C. Checking if `$_SERVER['REQUEST_METHOD']` is POST
- D. Checking if `$_GET` is set

ANSWER: C

59. Which is a correct way to define a constant in PHP?

- A. `define('CONST_NAME', 'Value');`
- B. `const CONST_NAME = 'Value';`
- C. Both a and b
- D. None of the above

ANSWER: C

60. How to access form data sent via the GET method in PHP?

- A. Using the `$_GET` superglobal
- B. Using the `$_POST` superglobal
- C. Using the `$_REQUEST` superglobal
- D. Using the `$_SERVER` superglobal

ANSWER: A

61. How will you connect PHP function to a MySQL database?

- A. `mysqli_connect()`
- B. `mysql_connect()`
- C. `db_connect()`
- D. `connect_db()`

ANSWER: A

62. Identify the issue in this PHP code for handling a form input:

```
if (isset($_GET['submit'])) {  
    echo $_POST['name'];  
}  
?>
```

- A. Incorrect use of \$_GET and \$_POST
- B. No issue
- C. Syntax error
- D. The input name should be 'submit' instead of 'name'

ANSWER: A

63. Identify the error in this PHP database connection code:

```
"$mysqli = new mysqli("localhost", "user",  
    "password"); $mysqli->select_db("database");"
```

- A. Missing database in the constructor
- B. No error in the code
- C. Syntax error in mysqli instantiation
- D. Improper method to select a database

ANSWER: A

64. Identify the error in the following PHP form handling code:

```
if ($_SERVER['REQUEST_METHOD'] == 'POST') {  
    echo $_POST[name];  
}  
?>
```

- A. Missing quotes around array key name
- B. Syntax error in if statement
- C. No error in the code
- D. Missing semicolon in echo statement

ANSWER: A

65. Which attribute in a form input element specifies the field's initial value?

- A. value
- B. name
- C. type
- D. placeholder

ANSWER: A

66. What is the correct way to declare a variable in PHP?

- A. int \$varName
- B. var \$varName
- C. declare \$varName
- D. \$varName

ANSWER: D

67. Given a form with method="post", which PHP array will contain the form's submitted data?

- A. \$_POST
- B. \$_REQUEST
- C. \$_GET
- D. \$_SERVER

ANSWER: A

68. Identify the output of the following PHP code if a user submits a form with an input named email?

```
if (isset($_POST['email'])) {  
    echo $_POST['email'];  
}  
?>
```

- A. NULL
- B. The value of the email input field
- C. An empty string
- D. An error message

ANSWER: B

69. When retrieving data from a MySQL database, which PHP function is used to fetch a row as an associative array?

- A. mysqli_fetch_assoc()
- B. mysqli_fetch_row()
- C. mysqli_fetch_array()
- D. mysqli_fetch_all()

ANSWER: A

70. In PHP, which function is used to execute a SQL query against a MySQL database?

- A. mysqli_query()
- B. execute_sql()
- C. mysql_query()
- D. run_query()

ANSWER: A

71. How does MongoDB handle data security?

- A. By providing encryption at rest and in transit
- B. Through authentication and authorization mechanisms
- C. With role-based access control (RBAC).
- D. All of the above

ANSWER: D

72. How to set a session data in Laravel?

- A. \$request->session()->put('key', 'value');
- B. \$request->db->session('key', 'value');
- C. \$request->session()->set('key', 'value');
- D. none

ANSWER: A

73. Which folder in Laravel includes the entire source code of the project?

- A. Events
- B. Public
- C. App
- D. Console

ANSWER: C

74. What is the extension of the folder which includes all the events for the project?

- A. .php
- B. .txt
- C. .xml
- D. .laravel

ANSWER: A

75. Which folder in Laravel contains model, controllers and views defined for the specific directories?

- A. Events
- B. Public
- C. Jobs
- D. Http

ANSWER: D

76. The database directories in Laravel includes how many sub-directories?

- A. 2
- B. 3
- C. 4
- D. 5

ANSWER: C

77. Which of the following folder is the root folder and helps in initializing the Laravel application?

- A. Events
- B. Public
- C. Resources
- D. Http

ANSWER: B

78. The ____ folder includes all the composer dependencies?

- A. Events
- B. Public
- C. Vendor
- D. Resources

ANSWER: C

79. ____ are those that offer your web application with a list of web services.

- A. Events
- B. Environment variables
- C. Routing
- D. Resources

ANSWER: C

80. All requests in Laravel are mapped using ____.

- A. Data binding
- B. Routes
- C. ORM
- D. None of the above

ANSWER: B

81. The terminate method in the middleware takes how many arguments?

- A. 2
- B. 4
- C. 5
- D. 6

ANSWER: A

82. Which of the following functions as a bridge between Views and Models?

- A. Objects
- B. Data binding
- C. Route
- D. Controller

ANSWER: D

83. How many arguments does Cookie() method take?

- A. 1
- B. 2
- C. 3
- D. 4

ANSWER: C

84. How many databases does Laravel support?

- A. 5
- B. 6
- C. 4
- D. 7

ANSWER: B

85. ____ are used to store information about the user across the requests.

- A. Localization
- B. Memcached
- C. Config
- D. Sessions

ANSWER: D

86. Which of the following is true about the SQL AS clause?

- A. The AS clause in SQL is used to change the column name in the output or assign a name to a derived column.
- B. The SQL AS clause can only be used with the JOIN clause.
- C. The AS clause in SQL is used to define a search condition.
- D. All of the mentioned

ANSWER: A

87. _____ clause creates a temporary relation for the query on which it is defined.

- A. FROM
- B. WITH
- C. SELECT
- D. WHERE

ANSWER: B

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88. A CASE SQL statement is _____?

- A. A way to establish a loop in SQL.
- B. A way to establish a data definition in SQL.
- C. A way to establish an IF-THEN-ELSE in SQL.
- D. All of the above.

ANSWER: C

89. A group of operations that form a single logical unit of work is known as:

- A. Transaction
- B. View
- C. Unit
- D. Network

ANSWER: A

90. Which command is used to change the definition of a table in SQL?

- A. UPDATE
- B. ALTER
- C. SELECT
- D. CREATE

ANSWER: B

91. Shared locks are applied while performing:

- A. Write operations
- B. Read operations
- C. A & B both
- D. None of the above

ANSWER: B

92. Why do we need to create an index if the primary key is already present in a table?

- A. Index improves the speed of data retrieval operations on a table.
- B. Indexes are synonyms of a column in a table.
- C. Indexes are special lookup tables that will be used by the database search engine.
- D. All of the above

ANSWER: A

93. Which type of JOIN is used to return rows that do not have matching values?

- A. Natural JOIN
- B. Outer JOIN
- C. EQUI JOIN
- D. All of the above

ANSWER: B

94. The SQL statement: SELECT ROUND (65.726, -1) FROM DUAL; prints:

- A. 726
- B. 70
- C. garbage
- D. is illegal

ANSWER: B

95. A sequence in SQL can generate a maximum number:

- A. 37 digits
- B. 38 digits
- C. 39 digits
- D. 40 digits

ANSWER: B

96. Which of the following is true about the HAVING clause?

- A. Similar to WHERE clause but is used for rows rather than columns.
- B. Similar to WHERE clause but is used for columns rather than groups.
- C. Acts exactly like a WHERE clause.
- D. Similar to WHERE clause but is used for groups rather than rows.

ANSWER: D

97. What is true about routines and triggers?

- A. Both consist of procedural code.
- B. Both run automatically.
- C. Both have to be called to operate.
- D. Both are stored in the database.

ANSWER: B

98. The command that lets you change one or more fields in a table is:

- A. INSERT
- B. MODIFY
- C. LOOK-UP
- D. All of the above

ANSWER: B

99. Which of the following is also called an INNER JOIN?

- A. EQUI JOIN
- B. NON-EQUI JOIN
- C. SELF JOIN
- D. None of the above

ANSWER: A

100. Sequence can generate:

- A. Numeric value
- B. Alphanumeric value
- C. A & B both
- D. None of the above

ANSWER: A

101. The _____ command makes the updates performed by the transaction permanent in the database.

- A. ROLLBACK
- B. COMMIT
- C. TRUNCATE
- D. DELETE

ANSWER: B

102. How can you change "Thomas" into "Michel" in the "LastName" column in the Users table?

- A. UPDATE User SET LastName = 'Thomas' INTO LastName = 'Michel'
- B. UPDATE Users SET LastName = 'Michel' WHERE LastName = 'Thomas'
- C. MODIFY Users SET LastName = 'Michel' WHERE LastName = 'Thomas'
- D. MODIFY Users SET LastName = 'Thomas' INTO LastName = 'Michel'

ANSWER: B

103. Which statement is true regarding procedures?

- A. They include procedural and SQL statements.
- B. It does not need unique names.
- C. They work similarly to the functions.
- D. It cannot be created with SQL statements.

ANSWER: A

104. Which is the basic approach for joining tables?

- A. Union JOIN
- B. Natural JOIN
- C. Subqueries
- D. All of the above

ANSWER: D

105. What does 'CRUD' stand for in MongoDB?

- A. Create, Read, Utilize, Deploy
- B. Create, Read, Update, Delete
- C. Create, Retrieve, Upload, Delete
- D. Connect, Read, Unload, Display

ANSWER: B

106. Which CRUD operation is used to add new data to a MongoDB database?

- A. Select
- B. Update
- C. Insert
- D. Delete

ANSWER: C

107. What is the primary function of the mongo shell?

- A. User authentication
- B. Data backup
- C. Database management and querying
- D. Server monitoring

ANSWER: C

108. Which of the following is required to install MongoDB?

- A. Java Runtime Environment
- B. Python
- C. Node.js
- D. None of these

ANSWER: D

109. Which method is used to insert a single document into a MongoDB collection?

- A. db.collection.insert()
- B. db.collection.insertOne()
- C. db.collection.create()
- D. db.collection.addOne()

ANSWER: B

110. In MongoDB, what is the role of the mongod process?

- A. Manages the database
- B. Handles replication
- C. Manages client connections
- D. Runs the shell interface

ANSWER: A

111. What does the find() method in MongoDB return?

- A. A cursor
- B. A JSON object
- C. An array of documents
- D. A single document

ANSWER: A

112. In MongoDB, what does the term 'collection' refer to?

- A. A type of index
- B. A group of databases
- C. A group of documents
- D. A single document

ANSWER: C

113. MongoDB fails to start with error "Address already in use". What is the likely cause?

- A. Insufficient permissions
- B. Port conflict with another application
- C. Corrupted installation
- D. Outdated MongoDB version

ANSWER: B

114. How do you specify an alternate configuration file when starting MongoDB?

- A. mongod -c /path/to/config
- B. mongod --use /path/to/config
- C. mongod --config /path/to/config
- D. mongod --file /path/to/config

ANSWER: C

115. Which file format is used for MongoDB configuration?

- A. JSON
- B. INI
- C. YAML
- D. XML

ANSWER: C

116. Which operating system is NOT supported by MongoDB?

- A. Windows
- B. Linux
- C. macOS
- D. iOS

ANSWER: D

117. What is the outcome of the command `db.createCollection("FirstCollection")` in MongoDB?

- A. Creates a new document
- B. Creates a new collection
- C. Deletes a collection
- D. Updates a collection

ANSWER: B

118. What is the default port for MongoDB server?

- A. 27018
- B. 27017
- C. 28017
- D. 27015

ANSWER: B

119. What does the upsert option do in an update operation in MongoDB?

- A. Updates all matching documents
- B. Deletes the document if it exists
- C. Inserts a new document if no match is found
- D. Updates an existing document, otherwise does nothing

ANSWER: C

120. In MongoDB, what is the purpose of the `$unset` operator in an update operation?

- A. To create a new field
- B. To delete a field from a document
- C. To hide a field in the output
- D. To set a field to null

ANSWER: B

121. What is the purpose of the `$set` operator in an update operation in MongoDB?

- A. To delete a document
- B. To update a document
- C. To add a new document
- D. To insert a document

ANSWER: B

122. Which command is used to start a MongoDB server?

- A. `mongo start`
- B. `mongod start`
- C. `run mongod`
- D. `start mongod`

ANSWER: B

123. How does MongoDB treat fields that are not specified in the `$set` part of an update operation?

- A. They are marked as undefined
- B. They remain unchanged
- C. They are deleted
- D. They are set to null

ANSWER: B

124. Identify the issue:

`mongodb --start`

- A. Incorrect command format
- B. Missing configuration file
- C. Outdated MongoDB version
- D. Incorrect file permissions

ANSWER: A

125. What is the main advantage of using prepared statements in PHP for database queries?

- A. Reduced memory usage
- B. Simplified syntax
- C. Increased query execution speed
- D. Enhanced security against SQL injection attacks

ANSWER: D

126. Which of the following is an appropriate use of PHP Data Objects (PDO)?

- A. Connecting to multiple database types
- B. Creating HTML content
- C. Parsing JSON data
- D. Managing PHP sessions

ANSWER: A

127. Which of the following is the correct way to add a comment in PHP code?

- A. //
- B. #
- C. /* */
- D. All of the mentioned

ANSWER: D

128. Who is the father of PHP?

- A. List Barely
- B. Rasmus Lerdorf
- C. Willam Makepiece
- D. Drek Kolkevi

ANSWER: B

129. Which is the right way of declaring a variable in PHP?

- A. \$this
- B. \$3hello
- C. \$_hello
- D. \$5_Hello

ANSWER: C

130. What does the connect_errno property of a mysqli object indicate in PHP?

- A. It returns the total number of failed connection attempts
- B. It stores the MySQL server version
- C. It is a boolean value indicating whether the connection was successful
- D. It indicates the error number of the last connection attempt

ANSWER: D

131. How to define a function in PHP?

- A. function {function body}
- B. function functionName(parameters) {function body}
- C. functionName(parameters) {function body}
- D. data type functionName(parameters) {function body}

ANSWER: B

132. Which of the following is the correct syntax to write a PHP code?

- A. < php >
- B. <?php ?>
- C. <? ?>
- D. < ? php ?>

ANSWER: B

133. Which of the following is the default file extension of PHP files?

- A. .html
- B. .ph
- C. .php
- D. .xml

ANSWER: C

134. What is PHP?

- A. PHP is used to develop dynamic and interactive websites
- B. PHP is a server-side scripting language
- C. PHP is an open-source programming language
- D. All of the mentioned

ANSWER: D

135. Find the output of the following PHP code?

```
<?php
$x = 10;
$y = 20;
if ($x > $y && 1||1)
print "1000 PHP MCQ";
else
print "Welcome to India";
?>
```

- A. 1000 PHP MCQ
- B. Welcome to India
- C. error
- D. no output

ANSWER: A

136. Find the output of the following PHP program?

```
<?php
$fruits = array ("apple", "orange", array ("pear",
"mango"),"banana");
echo (count($fruits, 1));
?>
```

- A. 6
- B. 4
- C. 3
- D. 5

ANSWER: A

137. Find the output of the following PHP program?

```
<?php
function calculate($num)
{
if ($num == 3)
echo "I Wonder";
if ($num == 7)
echo "Which One";
if ($num == 8)
echo "Is The";
if ($num == 19)
echo "Correct Answer";
}
$can = stripos("I love my India, I love my India
too!", "PHP");
calculate($can);
?>
```

- A. I Wonder
- B. Correct Answer
- C. Which One
- D. Is The

ANSWER: A

138. Which of the following commands is used to get a list of all possible Artisan commands?

- A. Display
- B. View
- C. List
- D. Show

ANSWER: C

139. Laravel is a ____ framework?

- A. React
- B. Python
- C. PHP
- D. Javascript

ANSWER: C

140. Where are all the Laravel Models stored at?

- A. Inside Laravel database
- B. Within a server
- C. Main app directory
- D. None of the above

ANSWER: C

141. What is the purpose of Laravel Blade Template Engine?

- A. Beautify Laravel
- B. Increase workload for students
- C. Make things harder
- D. Makes writing syntax easy and readable

ANSWER: D

142. Which one of the following commands is used to create middleware in Laravel?

- A. php artisan make: middleware
- B. php arti make: middleware
- C. php artisan: middleware
- D. none of the above

ANSWER: A

143. Which of the following method is used to delete an item from the session?

- A. Delete()
- B. Del()
- C. Expire()
- D. Forget()

ANSWER: D

144. Who developed Laravel?

- A. Guido van Rossum
- B. Rasmus Lerdorf
- C. Taylor Otwell
- D. Brendan Eich

ANSWER: C

145. Which of the following methods are used in Database Migrations classes?

- A. save() and update()
- B. execute() and rollback()
- C. run() and delete()
- D. up() and down()

ANSWER: D

146. _____ is the controller used for authentication?

- A. DefaultController
- B. CallController
- C. HomeController

ANSWER: C

147. Command to check the status of migration in Laravel application?

- A. php artisan migration status
- B. php artisan status
- C. php artisan migrate:status
- D. None of these

ANSWER: C

148. "In PHP, what security measure should be implemented to protect sensitive data, like passwords, stored in a database?"

- A. Storing them as plain text with unique identifiers
- B. Compressing them before storage
- C. Encrypting them using reversible encryption
- D. Hashing them using a cryptographic hash function

ANSWER: D

149. "By default, Laravel project runs on which PORT?"

- A. 3000
- B. 7000
- C. 5000
- D. 8000

ANSWER: D

150. Which of the following are the alternatives of Laravel?

- A. CakePHP
- B. Angular
- C. CodeIgniter
- D. Phalcon
- E) All of the above

ANSWER: E

151. Bootstrap directory in Laravel is used to:

- A. Load the configuration files
- B. Call Laravel library functions
- C. Initialize a Laravel application
- D. Load Laravel classes and models

ANSWER: C

152. Interpolation of variable in Laravel is done using:

- A. compact
- B. {{}}
- C. helpers

ANSWER: B

153. Which keyword allows the developers to shorten the namespace?

- A. use
- B. class
- C. artisan
- D. extend

ANSWER: A

154. Which of the following is the oldest broadcasting organization who uses Laravel?

- A. Netflix
- B. Facebook
- C. BBC
- D. IBM

ANSWER: C

155. How can you display a view in a Laravel application?

- A. By using the render() method of the View class
- B. By using the view() helper function
- C. By using the display() method of the View class
- D. Both A and B options are right

ANSWER: D

156. Command to rollback all migrations operations?

- A. php artisan reset:migration
- B. php artisan reset
- C. php artisan migrate:reset
- D. php artisan migration:reset

ANSWER: C

157. In Laravel which method is used to store the data in session?

- A. Get()
- B. Set()
- C. Put()
- D. Post()

ANSWER: C

158. Consider the PHP code:

```
$stmt = $mysqli->prepare("SELECT * FROM users  
WHERE id = ?");  
$stmt->bind_param("i", $iD);
```

What does the "i" in bind_param() signify?

- A. Incremental value
- B. Input parameter
- C. Integer data type
- D. Invalid parameter

ANSWER: C

159. Which SQL clause is used to remove duplicates from the result set?

- A. DELETE
- B. DROP
- C. DISTINCT
- D. UNIQUE

ANSWER: C

160. Which SQL statement is used to remove data from a MySQL database?

- A. ERASE
- B. CLEAR
- C. DELETE
- D. REMOVE

ANSWER: C

161. Which of the following options are correct regarding the views?

- A. Views contain base tables.
- B. Views cannot contain derived columns.
- C. Views do not contain base tables.
- D. Views can contain derived columns.

ANSWER: D

162. Which SQL clause is used to filter the records returned from a SQL query?

- A. SELECT
- B. FROM
- C. ORDER BY
- D. WHERE

ANSWER: D

163. Which SQL command is used to remove a table and all its data from a database?

- A. DROP
- B. REMOVE
- C. DELETE
- D. None of the above

ANSWER: A

164. What is the difference between a PRIMARY KEY and a UNIQUE KEY?

- A. Primary key cannot be a date variable whereas unique key can be.
- B. We can have only one primary key in a table while we can have multiple unique keys.
- C. Primary key can store null value, whereas a unique key cannot store null value.
- D. None of these

ANSWER: B

165. What is the purpose of the AUTO_INCREMENT attribute in MySQL?

- A. Adds random numbers
- B. Adds unique identifiers incrementally
- C. Adds a timestamp automatically
- D. Adds fixed numbers

ANSWER: B

166. Which operator is used to compare the NULL values in SQL?

- A. IS
- B. Equal
- C. IN
- D. None of the above

ANSWER: A

167. Which of the following is the correct order of a SQL statement?

- A. SELECT, WHERE, GROUP BY, HAVING
- B. SELECT, WHERE, HAVING, GROUP BY
- C. SELECT, GROUP BY, WHERE, HAVING
- D. SELECT, HAVING, WHERE, GROUP BY

ANSWER: A

168. MySQL belongs to which category of database management systems?

- A. Hierarchical DBMS
- B. Network DBMS
- C. Object-oriented DBMS
- D. Relational DBMS

ANSWER: D

169. What is MySQL primarily used as?

- A. A database management system
- B. A browser
- C. A programming language
- D. A web server

ANSWER: A

170. Which of the following is true about the SQL DELETE statement?

- A. The SQL DELETE statement removes the table structure and all data within it.
- B. The SQL DELETE statement does not remove the table structure.
- C. The SQL DELETE statement removes the table structure from the database.
- D. None of the above

ANSWER: B

171. What does the SQL COUNT() function do?

- A. Counts only unique values in a column
- B. Counts only non-null values in a column
- C. Counts all values in a column
- D. Counts all numeric values in a column

ANSWER: B

172. SQL injection is an attack in which SQL code is _____:

- A. Deleted from a field in a poorly designed application.
- B. Updated in a field in a poorly designed application.
- C. Inserted in a field in a poorly designed application.
- D. None of the above.

ANSWER: C

173. SQL keywords are case sensitive.

- A. All keywords are sensitive
- B. Some are sensitive
- C. None are sensitive
- D. Depends on version

ANSWER: C

174. Which of the following statement is correct regarding the difference between TRUNCATE, DELETE and DROP command?

- A. TRUNCATE and DROP operations can be rolled back but DELETE operations cannot be rolled back.
- B. DELETE is an example of DML, but TRUNCATE and DROP are examples of DDL.
- C. DELETE operation can be rolled back but TRUNCATE and DROP operations cannot be rolled back.
- D. All are examples of DDL.

ANSWER: C

175. Identify the issue in the following SQL statement:
SELECT FROM users WHERE username='admin';

- A. SELECT clause is incomplete
- B. Syntax is correct
- C. Missing semicolon
- D. WHERE clause is incorrect

ANSWER: A

176. The types of Triggers in SQL are:

- A. Logon Triggers
- B. DDL Triggers
- C. DML Triggers
- D. All of the above

ANSWER: D

177. Which command is used to access a MySQL database via command line?

- A. mysql -u user -p
- B. ssh database
- C. connect to mysql
- D. open mysql

ANSWER: A

178. What does the following MySQL command do?
CREATE DATABASE SampleDB;

- A. Creates a new schema named SampleDB
- B. Deletes the database SampleDB
- C. Creates a new database named SampleDB
- D. Creates a new table named SampleDB

ANSWER: C

179. Which is not a feature of a cursor?

- A. Binds variables in a query.
- B. Allows positioning at specific rows of the result set.
- C. It is used to execute a single SQL query.
- D. Allows the rows of a result set to be processed one at a time.

ANSWER: C

180. Which of the following is not a valid SQL keyword?

- A. IN
- B. BETWEEN
- C. LIKE
- D. WHERE

ANSWER: D

181. What does this command do?

`db.products.find({price: {$gt: 100}})`

- A. Finds products with a price less than 100
- B. Finds products with a price equal to 100
- C. Updates the price of products over 100
- D. Finds products with a price greater than 100

ANSWER: D

182. Which MongoDB command is used to add a new field to an existing document?

- A. `db.collection.addField({newField: value})`
- B. `db.collection.newField({newField: value})`
- C. `db.collection.add({}, {newField: value})`
- D. `db.collection.update({}, {$set: {newField: value}})`

ANSWER: D

183. Identify the issue: `db.users.find({age: "25"})`

- A. Incorrect field name
- B. Incorrect collection name
- C. Missing query operator
- D. Type mismatch in query value

ANSWER: D

184. Which of the following code snippets demonstrates the correct way to create an index on the "name" field in the "Firstcollection" collection?

- A. `collection.createIndex(Indexes.ascending("name"));`
- B. `collection.createIndex(new Document("name", 1));`
- C. `collection.createIndex(Field.name("name"));`
- D. `collection.createIndex("name");`

ANSWER: B

185. Spot the error in this command:

`db.collection.deleteOne({ _id: 101 })`

- A. No error
- B. Missing quotation marks around the `_id` value
- C. Incorrect field value
- D. Incorrect method name

ANSWER: B

186. What is a 'schema' in MongoDB?

- A. A security feature
- B. A predefined structure for data
- C. A query language for the database
- D. A tool for data replication

ANSWER: B

187. Which of the following code snippets demonstrates the correct way to count the number of documents in the "FirstCollection" collection that match a specific condition?

- A. `db.FirstCollection.countDocuments({condition})`
- B. `db.FirstCollection.find({condition}).count()`
- C. `db.FirstCollection.count({condition})`
- D. All of the above

ANSWER: D

188. What is the primary benefit of embedding documents in MongoDB?

- A. To enforce data consistency
- B. To reduce data duplication
- C. To speed up queries
- D. To simplify query syntax

ANSWER: B

189. Which of the following code snippets demonstrates the correct way to delete all documents from the "FirstCollection" collection where the "age" field is greater than 25?

- A. `collection.remove(new Document("age", new Document("$gt", 25)));`
- B. `collection.deleteMany(new Document("age", new Document("$gt", 25)));`
- C. `collection.delete(new Document("age", new Document("$gt", 25)));`
- D. `collection.remove(new Document("age", ">" + 25));`

ANSWER: B

190. What will the following command do?

`db.users.remove({})`

- A. Remove the 'users' collection
- B. Remove one random document
- C. Do nothing
- D. Remove all documents from the 'users' collection

ANSWER: D

191. In MongoDB, what is a potential drawback of deeply nested documents?

- A. Increased query performance
- B. Improved data consistency
- C. Simplified data retrieval
- D. Limitations in depth and size

ANSWER: D

192. Which of the following code snippets demonstrates the correct way to drop the "newcollection" collection from the database?

- A. `db.collection("newcollection").drop();`
- B. `db.dropCollection("newcollection");`
- C. `collection.drop();`
- D. `collection.dropCollection();`

ANSWER: C

193. What's wrong with this update command?

`db.users.update({name: "John"}, {age: 30})`

- A. It updates all users named John
- B. There's no issue
- C. It's missing the \$set operator
- D. It replaces the entire document

ANSWER: C

194. What is the advantage of using a normalized data model in MongoDB?

- A. Improved write performance
- B. Simplified queries
- C. Increased data redundancy
- D. Reduced data redundancy

ANSWER: D

195. Which command is used to update all documents that meet certain criteria in MongoDB?

- A. db.collection.updateMany()
- B. db.collection.modify()
- C. db.collection.update()
- D. db.collection.updateOne()

ANSWER: A

196. Which of the following code snippets demonstrates the correct way to aggregate documents in the "FirstCollection" collection and group them by the "city" field?

- A. Aggregation pipeline =
collection.aggregate(Aggregation.group("city"));
List<Document> results =
pipeline.getMappedResults(Document.class);
- B. Aggregation aggregation = new
Aggregation(Aggregation.group("city"));
List<Document> results =
collection.aggregate(aggregation,
Document.class).getMappedResults();
- C. AggregationPipeline pipeline =
Aggregation.group("city"); List<Document> results =
collection.aggregate(pipeline).into(new
ArrayList<>());
- D. Aggregation pipeline =
Aggregation.group("city").into(new
ArrayList<Document>()); List<Document> results =
collection.aggregate(pipeline);

ANSWER: C

197. Why might db.collection.insertOne({name: "Jack", age: null}) not add a new document?

- A. 'name' field is duplicated
- B. Collection does not exist
- C. 'age' field cannot be null
- D. Missing required fields

ANSWER: B

198. In MongoDB, when should you use references instead of embedding?

- A. When data is rarely accessed
- B. When data size is small
- C. When data duplication is a concern

D. When data is frequently updated

ANSWER: C

199. How does MongoDB handle schema validation?

- A. Automatically upon every insert and update
- B. It does not support schema validation
- C. Through user-defined validation rules
- D. Only during collection creation

ANSWER: C

200. Which PHP functions can be used for generating unique ids?

- A. md5()
- B. uniqueid()
- C. mdid()
- D. id()

ANSWER: B

201. What does PHP stand for?

- A. PHP stands for Preprocessor Home Page
- B. PHP stands for Pretext Hypertext Processor
- C. PHP stands for Hypertext Preprocessor
- D. PHP stands for Personal Hyper Processor

ANSWER: C

202. A function which starts with __ (double underscore) is known as _____

- A. Default Function
- B. User Defined Function
- C. Inbuilt Function
- D. Magic Function

ANSWER: D

203. Which of the following web servers are required to run the PHP script?

- A. Apache and PHP
- B. IIS
- C. XAMPP
- D. Anyone mentioned above

ANSWER: D

204. In the following PHP program, what is/are the properties?

```
<?php
class Example
{
    public $name;
    function Sample()
    {
        echo "Learn PHP @ India";
    }
}
```

- A. function Sample()
- B. echo "This is an example";
- C. public \$name;
- D. class Example

ANSWER: C

205. Find the output of the following PHP code?

```
<?php
"define("GREETING", "PHP is a scripting
language");"
echo $GREETING;
?>
```

- A. \$GREETING
- B. no output
- C. PHP is a scripting language
- D. GREETING

ANSWER: B

206. How many functions does PHP offer for searching and modifying strings using Perl-compatible regular expressions?

- A. 10
- B. 5
- C. 8
- D. 2

ANSWER: C

207. Find the output of the following PHP code snippet?

```
<?php
$url = "phpmcq@India.com";
echo ltrim(strstr($url, "@"), "@");
?>
```

- A. phpmcq@India.com
- B. php@India.com
- C. phpmcq@
- D. India.com

ANSWER: D

208. Which of the following functions can be used to get the current memory usage?

- A. memory_get_usage()
- B. memory_get_peak_usage()
- C. get_peak_usage()
- D. get_usage()

ANSWER: A

209. Which function is used to determine a file's last access time?

- A. filetime()
- B. fileatime()
- C. fileltime()
- D. filectime()

ANSWER: B

210. PHP recognizes constructors by the name _____

- A. function __construct()
- B. function _construct()
- C. classname()
- D. _construct()

ANSWER: A

211. Find the output of the following PHP code?

```
<?php
$x = 50;
$y = 100;
function fun()
{
    $y = $GLOBALS['x'] + $GLOBALS['y'];
}
fun();
echo $y;
?>
```

- A. 50
- B. 100
- C. 150
- D. Error

ANSWER: B

212. Which version of PHP deprecated the safe mode feature?

- A. PHP 5.3.1
- B. PHP 5.3.0
- C. PHP 5.1.0
- D. PHP 5.2.0

ANSWER: B

213. Define the value of the variable \$input in the following PHP program?

```
<?php
$input = "PHP<td>stands
for</td>Hypertext<i>Preprocessor</i>!";
$input = strip_tags($input,"<i></i>");
echo $input;
?>
```

- A. PHP stands for Hypertext <i>Preprocessor</i>!
- B. PHP stands for Hypertext Preprocessor!
- C. PHP <td>stands for</td> Hypertext <i>Preprocessor</i>!
- D. PHP <td>stands for</td> Hypertext Preprocessor!

ANSWER: A

214. Which of the following variables does PHP use to authenticate a user?

- i) \$_SERVER['PHP_AUTH_USER'].
- ii) \$_SERVER['PHP_AUTH_USERS'].
- iii) \$_SERVER['PHP_AUTH_PU'].
- iv) \$_SERVER['PHP_AUTH_PW'].

- A. ii) and iv)
- B. i) and iv)
- C. ii) and iii)
- D. i) and ii)

ANSWER: B

215. PDO stands for?

- A. PHP Database Orientation
- B. PHP Data Orientation
- C. PHP Data Object
- D. PHP Database Object

ANSWER: C

216. Identify the output of the following PHP program?

```
<?php
$a = 200;
if ($a > 100)
    printf("PHP Quiz");
else if ($a > 200)
    printf("PHP MCQ");
else if ($a >= 300)
    printf("PHP Program");
?>
```

- A. PHP Quiz
- B. PHP MCQ
- C. PHP Program
- D. No output

ANSWER: A

217. Different looping statements supported by PHP?

- i) for loop
- ii) while loop
- iii) do-while loop
- iv) foreach loop

- A. Only iv)
- B. i) and ii)
- C. i), ii) and iii)
- D. i), ii, iii) and iv)

ANSWER: D

218. Identify the PHP statement will give output as \$x on the screen?

- A. echo "\\$x";
- B. echo "\$\$x";
- C. echo "/\$x";
- D. echo "\$x";

ANSWER: A

219. Which version of PHP introduced the advanced concepts of OOP?

- A. PHP 6
- B. PHP 4
- C. PHP 5
- D. PHP 5.3

ANSWER: C

220. What is the purpose of Laravel's php artisan tinker command?

- A. To run tests for the application
- B. To generate API documentation
- C. To optimize the application's performance
- D. To interact with the application's code in an interactive shell

ANSWER: D

221. Which of the following is NOT a valid HTTP method in Laravel's routing system?

- A. PATCH
- B. OPTIONS
- C. DELETE
- D. REDIRECT

ANSWER: D

222. Which of the following code snippets demonstrates how to define a route with a prefix in Laravel?

```
Route::prefix('admin')->group(function () {
    Route::get('/dashboard',
'DashboardController@index');
    Route::get('/profile', 'ProfileController@show');
});
```

- A. Defines routes for admin dashboard and profile.
- B. Defines routes for managing comments.
- C. Defines routes for managing user profiles.
- D. Defines routes for managing blog posts.

ANSWER: A

223. Which of the following is NOT a valid method to define a route prefix in Laravel?

- A. `Route::setPrefix('admin')`
- B. `Route::namespace('admin')`
- C. `Route::prefix('admin')`
- D. `Route::group(['prefix' => 'admin'])`

ANSWER: A

224. Laravel uses the Blade `@extends` directive for defining the child elements.

- A. Can be true or false
- B. TRUE
- C. FALSE
- D. Cannot say

ANSWER: B

225. What is the purpose of Laravel's php artisan `make:provider` command?

- A. To create a new middleware provider
- B. To create a new service provider
- C. To create a new event provider
- D. To create a new authentication provider

ANSWER: B

226. What is the purpose of Laravel's php artisan `make:job` command?

- A. To create a new queueable job
- B. To create a new model job
- C. To create a new controller job
- D. To create a new database migration job

ANSWER: A

227. What is the purpose of Laravel's php artisan `route:clear` command?

- A. To clear the application cache
- B. To clear the session data
- C. To clear the route cache
- D. To clear the configuration cache

ANSWER: C

228. Which of the following code snippets demonstrates how to define a middleware group in Laravel?

```
Route::middleware(['auth', 'admin'])->group(function () {
```

```
Route::get('/dashboard',  
'DashboardController@index');
```

```
Route::get('/profile', 'ProfileController@show');  
});
```

- A. Defines a middleware group for admin users.
- B. Defines a middleware group for API requests.
- C. Defines a middleware group for guest users.
- D. Defines a middleware group for authenticated users.

ANSWER: A

229. Which of the following statements is true about Laravel's events and listeners?

- A. Events are responsible for handling HTTP requests
- B. Listeners are responsible for defining database schema
- C. Events are triggered by listeners
- D. Listeners are triggered by events

ANSWER: D

230. Which of the following code snippets demonstrates how to define a resourceful route in Laravel?

```
Route::resource('photos', 'PhotoController');
```

- A. Defines routes for managing photos.
- B. Defines routes for managing user profiles.
- C. Defines routes for managing blog posts.
- D. Defines routes for managing comments.

ANSWER: A

231. Which of the following code snippets demonstrates how to define a route group in Laravel?

```
Route::middleware(['auth'])->group(function () {  
    Route::get('/dashboard',  
    'DashboardController@index');  
    Route::get('/profile', 'ProfileController@show');  
});
```

- A. Defines a route group for API routes.
- B. Defines a route group for admin-specific routes.
- C. Defines a route group for guest-specific routes.
- D. Defines a route group for user-specific routes.

ANSWER: D

232. Which of the following code snippets demonstrates how to define a route with multiple HTTP methods in Laravel?

```
Route::match(['get', 'post'], '/products', function ()  
{  
    return 'Products Page';  
});
```

- A. Defines a route for deleting a product.
- B. Defines a route for viewing product details.
- C. Defines a route for updating product details.
- D. Defines a route for adding a new product.

ANSWER: D

233. Which command is used to create a migration file in Laravel with a specific table name and columns?

- A. php artisan make:migration create_table_name --fields=name:string,age:integer
- B. php artisan make:migration create_table_name --schema=name:string,age:integer
- C. php artisan make:migration create_table_name --create=table_name
- D. php artisan make:migration create_table_name --table=name,age

ANSWER: B

234. Which command is used to start the Laravel development server?

- A. php artisan run-server
- B. php artisan start-server
- C. php artisan serve
- D. php artisan start

ANSWER: C

235. What is the purpose of Laravel's php artisan make:factory command?

- A. To create a new middleware factory
- B. To create a new model factory
- C. To create a new controller factory
- D. To create a new database migration

ANSWER: B

236. In Laravel, which of the following relationships defines a one-to-many relationship?

- A. belongsToMany()
- B. hasMany()
- C. belongsTo()
- D. hasOne()

ANSWER: B

237. What does the GROUP BY statement do in a SQL query?

- A. Modifies data in a group
- B. Sorts the output
- C. Groups data based on one or more columns
- D. Deletes groups of data

ANSWER: C

238. Which SQL statement is used to change data in an existing row?

- A. ALTER
- B. CREATE
- C. UPDATE
- D. INSERT

ANSWER: C

239. What does the DISTINCT keyword do in a SQL query?

- A. Orders results
- B. Removes duplicates from results
- C. Creates a distinct file
- D. Counts rows

ANSWER: B

240. Which data type would be best for storing an email address?

- A. CHAR(50)
- B. VARCHAR(100)
- C. BLOB
- D. TEXT

ANSWER: B

241. Which SQL statement correctly creates a table with a column for storing binary data?

- A. CREATE TABLE Files (Data BINARY(64));
- B. CREATE TABLE Files (Data CHAR(64));
- C. CREATE TABLE Files (Data TEXT);
- D. CREATE TABLE Files (Data BLOB);

ANSWER: D

242. What is the purpose of the VARCHAR data type in MySQL?

- A. To store variable-length strings
- B. To store large text objects
- C. To store integers
- D. To store fixed-length strings

ANSWER: A

243. What is the default sort order of the ORDER BY statement in SQL?

- A. Descending
- B. Fixed
- C. Random
- D. Ascending

ANSWER: D

244. Which data type in MySQL is used to store boolean values?

- A. BOOLEAN
- B. VARCHAR
- C. SMALLINT
- D. TINYINT

ANSWER: D

245. Which of the following SQL statements is used to add new data into a database?

- A. CREATE
- B. UPDATE
- C. SELECT
- D. INSERT

ANSWER: D

246. What is the result of the following SQL query?

SELECT 15 + 25;

- A. '15 + 25'
- B. 15
- C. 40
- D. 25

ANSWER: C

247. Consider the following SQL command: DELETE FROM Customers WHERE CustomerID = 3; What does it do?

- A. Updates CustomerID to 3
- B. Deletes the customer record with CustomerID 3
- C. Deletes all records from Customers
- D. None of the above

ANSWER: B

248. What does the following SQL command achieve? UPDATE Products SET Price = Price * 1.1 WHERE Category = 'Electronics';

- A. Increases the price of all products by 10%
- B. None of the above
- C. Decreases the price of all products by 10%
- D. Increases the price of electronics products by 10%

ANSWER: D

249. Identify the error in this SQL statement: INSERT INTO Order (ID, Product) VALUES (101, 'Laptop');
A. The Product column does not exist
B. Missing semicolon at the end
C. Table name should be Orders
D. Syntax is correct

ANSWER: C

250. What is the primary use of the ENUM data type in MySQL?
A. To create a queue structure
B. To store arrays
C. To limit input to a list of possible values
D. To log changes

ANSWER: C

251. In MySQL, which data type is most appropriate for storing monetary values?
A. FLOAT
B. DOUBLE
C. INTEGER
D. DECIMAL

ANSWER: D

252. What is the main difference between CHAR and VARCHAR data types in MySQL?
A. CHAR is variable-length, VARCHAR is fixed-length
B. CHAR stores binary data, VARCHAR does not
C. CHAR has unlimited length, VARCHAR is limited
D. CHAR is fixed-length, VARCHAR is variable-length

ANSWER: D

253. Consider the following SQL statement: ALTER TABLE Employees ADD COLUMN Birthdate DATE; What does this statement do?
A. Changes the data type of Birthdate
B. Adds a new column Birthdate to store dates
C. Adds a new row called Birthdate
D. Deletes the Birthdate column

ANSWER: B

254. What does the following SQL command achieve?
CREATE TABLE Orders (OrderID INT, OrderDate DATETIME DEFAULT CURRENT_TIMESTAMP);
A. Creates a table and makes OrderDate a primary key
B. Creates a table and sets a default timestamp for OrderDate
C. Creates a table with two columns without defaults
D. None of the above

ANSWER: B

255. Which operator is used in MongoDB to select documents where a field equals a specified value?
A. \$set
B. \$match
C. \$eq
D. \$get

ANSWER: C

256. What does the \$in operator do in a MongoDB query?
A. Changes the value of a field to one within a specified array
B. Counts how many times a field's value appears in a specified array
C. Selects documents where a field's value is any of the specified array values
D. None of the above

ANSWER: C

257. What is the purpose of the \$and operator in MongoDB queries?
- A. To compare two fields in the same document
 - B. To perform a logical AND operation on an array of two or more expressions
 - C. To update data in a document conditionally
 - D. To add new fields to documents

ANSWER: B

258. How do you create a descending index on the 'count' field in MongoDB?
- A. `db.collection.createIndex({count: "descending"})`
 - B. `db.collection.createIndex({count: 0})`
 - C. `db.collection.createIndex({count: "desc"})`
 - D. `db.collection.createIndex({count: -1})`

ANSWER: D

259. What is the purpose of the \$match stage in MongoDB's aggregation pipeline?
- A. To limit the number of documents
 - B. To group documents
 - C. To filter documents based on criteria
 - D. To sort documents

ANSWER: C

260. How can you create a text index on two fields, 'title' and 'description', in MongoDB?
- A. `db.collection.addTextIndex({title, description})`
 - B. `db.collection.createIndex({title: 1, description: 1}, {type: "text"})`
 - C. `db.collection.createIndex({title: "text", description: "text"})`
 - D. `db.collection.createTextIndex({title, description})`

ANSWER: C

261. Identify the error in this command:
`db.collection.createIndex({name: "5"})`
- A. Syntax error in the index specification
 - B. No error
 - C. Incorrect field name
 - D. Incorrect index type

ANSWER: A

262. Why might an aggregation pipeline return incorrect results after adding a new index?
- A. The index has caused a change in the data order
 - B. The index is not being used
 - C. The index is corrupt
 - D. The pipeline does not support indexing

ANSWER: A

263. Which command can be used to create a schema validation rule in MongoDB?
- A. `db.createCollection("users", {validator: {...}})`
 - B. `db.schema.create({...})`
 - C. `db.users.validateSchema({...})`
 - D. `db.users.setSchema({...})`

ANSWER: A

264. How can you enforce that all documents in the 'movie' collection have a 'title' field in MongoDB?
- A. `db.movie.createIndex({title: 1}, {unique: true})`
 - B. `db.movie.update({}, {$set: {title: {$exists: true}}})`
 - C. `db.movie.modifySchema({title: {$exists: true}})`
 - D. `db.movie.setValidator({title: {$exists: true}})`

ANSWER: D

265. What does this MongoDB command do:
`db.runCommand({coll_Mod: "newcollection",
validator: {...}})?`
- A. Modifies an existing collection's schema
 - B. Deletes and recreates the collection with a new schema
 - C. Creates a new collection
 - D. Runs a database maintenance operation

ANSWER: A

266. How would you add a field with a default value to an existing MongoDB collection?
- A. `"db.collection.addField("newField", "defaultValue")"`
 - B. `"db.collection.setDefault({newField: "defaultValue"})"`
 - C. `"db.collection.modify({}, {$setDefault: {newField: "defaultValue"}})"`
 - D. `"db.collection.updateMany({}, {$set: {newField: "defaultValue"}})"`

ANSWER: D

267. Why might `db.users.insert({name: "Mathew", age: "25"})` fail in a collection with schema validation?
- A. The 'name' field is duplicated
 - B. The 'age' field is not an integer
 - C. There's no 'age' field in the schema
 - D. No error

ANSWER: B

268. Spot the error in nested schema validation:
`{validator: {address: {state: {$type: "string"}}}}`
- A. 'address' must be an embedded document
 - B. state' is not a valid field type
 - C. Nested validation is not supported
 - D. No error

ANSWER: A

269. What is the primary purpose of indexing in MongoDB?
- A. To enhance security
 - B. To increase data storage efficiency
 - C. To simplify data aggregation
 - D. To speed up query performance

ANSWER: D

270. What is a compound index in MongoDB?
- A. An index on a single field
 - B. An index combining multiple fields
 - C. A unique index
 - D. A text index

ANSWER: B

271. What happens when you create an index on a field that has duplicate values in MongoDB?
- A. Only the first occurrence is indexed
 - B. The index is created with no issues
 - C. The index creation fails
 - D. The duplicate values are removed

ANSWER: B

272. How does the \$group stage in the aggregation pipeline operate?
- A. It groups documents by specified criteria
 - B. It sorts the documents
 - C. It merges documents into a single document
 - D. It filters the documents

ANSWER: A

273. What is the impact of indexing on write performance in MongoDB?
- A. It can slow down write performance
 - B. It improves write performance
 - C. It has no impact
 - D. It varies depending on the document size

ANSWER: A

274. Which command creates a simple index on the 'firstname' field in MongoDB?

- A. `db.collection.createIndex({firstname: 1})`
- B. `db.collection.index({firstname: 1})`
- C. `db.collection.addIndex({firstname: 1})`
- D. `db.collection.setIndex({firstname: 1})`

ANSWER: A

275. What could be wrong if `db.collection.createIndex({email: 1}, {unique: true})` fails to enforce uniqueness?

- A. The 'email' field is not indexed
- B. The collection already has duplicate emails
- C. MongoDB does not support unique indexes
- D. The index is not properly configured

ANSWER: B

276. Identify the error: An aggregation pipeline with `$sort`, `$match`, and `$group` stages returns no results.

- A. No error
- B. The `$group` stage has an error in the grouping key
- C. The `$sort` stage is misplaced
- D. The `$match` stage is using incorrect criteria

ANSWER: D

277. How do you restrict access to specific rows of a table through a view?

- A. By setting permissions on the base table
- B. Using a `WHERE` clause in the view definition
- C. Views cannot restrict row access
- D. Using the `WITH RESTRICT` clause

ANSWER: B

278. Identify the issue: `db.createCollection("users", {validation: {age: {$type: "int"}}})`

- A. The 'age' field type should be 'number'
- B. The 'users' collection already exists
- C. No issue
- D. Incorrect syntax for schema validation

ANSWER: D

279. What's wrong with this schema validation rule: `{validator: {email: {$regex: /@mongodb.com$/}}}`?

- A. No issue
- B. The field 'email' doesn't exist
- C. The validator should be set on the collection level
- D. The regex is incorrect

ANSWER: C

280. What does the following SQL command do?

```
CREATE VIEW ActiveUsers AS SELECT * FROM Users WHERE Status = 'Active';
```

- A. Creates a new table `ActiveUsers` with data from `Users`
- B. Creates a view showing only active users from `Users`
- C. Updates the status of all users in `Users`
- D. Deletes inactive users from `Users`

ANSWER: B

281. What does this command do?

```
CREATE OR REPLACE VIEW CustomerDetails AS SELECT Name, Email FROM Customers WHERE Active = 1;
```

- A. Replaces an existing view or creates a new one displaying certain customer info
- B. Deletes the old `CustomerDetails` view and creates a new one
- C. Alters the `Customers` table structure
- D. None of the above

ANSWER: A

282. What is the purpose of the SQL command `SHOW FULL TABLES WHERE Table_type = 'VIEW';`?

- A. To display only the views in the database
- B. To modify the type of tables to views
- C. To list all tables in the database
- D. To delete views from the database

ANSWER: A

283. How does the INFORMATION_SCHEMA.VIEWS table help users?
- A. It creates new views
 - B. It changes the definitions of views
 - C. It displays metadata about each view in the database
 - D. It shows the SQL statements for all views in the database

ANSWER: C

284. Identify the error in this view creation:

```
CREATE VIEW TotalProducts AS SELECT  
COUNT(*) FROM Products;
```

- A. Missing alias for COUNT(*)
- B. Syntax is correct
- C. Should use SUM instead of COUNT
- D. View cannot contain aggregate functions

ANSWER: A

285. What is wrong with this SQL command?

```
CREATE VIEW CustomerContacts AS SELECT  
CustomerID, ContactName, ContactEmail FROM  
Customers WHERE ContactEmail LIKE '%@%';
```

- A. There is no error
- B. The view includes too many columns
- C. The WHERE clause is invalid for a view
- D. The LIKE operator is used incorrectly

ANSWER: A

286. How do you execute a stored procedure named 'CalculateDiscount' that takes two parameters in MySQL?

- A. RUN CalculateDiscount(100, 20);
- B. EXECUTE CalculateDiscount;
- C. CALL CalculateDiscount(100, 20);
- D. LAUNCH CalculateDiscount(100, 20);

ANSWER: C

287. What is the impact of declaring a variable with the same name as a column in a stored procedure?
- A. It automatically updates the column
 - B. It leads to an error due to name conflict
 - C. It has no effect
 - D. It hides the column for the duration of the procedure

ANSWER: D

288. Identify the error in this stored procedure creation:

```
CREATE PROCEDURE UpdateUser() BEGIN  
UPDATE UserDetails SET age = age + 1; END;
```

- A. Missing parameters for user identification
- B. Syntax is correct
- C. Unnecessary semicolon at END
- D. Should use a function instead

ANSWER: A

289. What is wrong with this SQL command?

```
CREATE PROCEDURE ResetLog() ; DELETE  
FROM LogEntries;
```

- A. Incorrect procedure syntax
- B. DELETE statement should include a WHERE clause
- C. Should be a function
- D. Syntax is correct

ANSWER: A

290. What is a trigger in MySQL?

- A. A feature that automatically updates table indexes
- B. A scheduled task that runs queries periodically
- C. A predefined action executed in response to an event
- D. A mechanism to replicate data between databases

ANSWER: C

291. Which of the following is NOT a valid event for a trigger in MySQL?

- A. BEFORE UPDATE
- B. ON SELECT
- C. AFTER DELETE
- D. AFTER INSERT

ANSWER: B

292. What is the limitation of a trigger in MySQL related to control statements?

- A. Triggers cannot include control statements
- B. Triggers can rollback only
- C. Triggers can commit only
- D. Triggers cannot execute SELECT statements

ANSWER: A

293. What does the following SQL trigger do?

```
CREATE TRIGGER CheckAge BEFORE INSERT
ON Employees FOR EACH ROW BEGIN IF
NEW.Age < 18 THEN SIGNAL SQLSTATE '45000'
SET MESSAGE_TEXT = 'Employee too young';
END IF; END;
```

- A. Calculates average age of employees
- B. Updates age of new employees
- C. Deletes records of young employees
- D. Prevents insertion of employees under 18

ANSWER: D

294. What action is performed by this SQL statement?

```
CREATE TRIGGER UpdateLog AFTER UPDATE
ON Documents FOR EACH ROW BEGIN INSERT
INTO ChangeLog (DocID, ChangedOn) VALUES
(OLD.DocID, NOW()); END;
```

- A. Creates a backup of documents
- B. Deletes old document records
- C. Logs changes to documents
- D. None of the above

ANSWER: C

295. What is a view in MySQL?

- A. user interface for databases
- B. A tool for database design
- C. A physical table in the database
- D. A saved SQL query that can be treated as a table

ANSWER: D

296. How does this trigger function?

```
CREATE TRIGGER SyncAudit BEFORE UPDATE
ON Accounts FOR EACH ROW BEGIN UPDATE
Audit SET Balance = NEW.Balance WHERE
AccountID = OLD.AccountID; END;
```

- A. Creates a new account
- B. Deletes old audit records
- C. Synchronizes balances in the Audit table when Accounts are updated
- D. None of the above

ANSWER: C

297. Identify the mistake in this trigger definition:

```
CREATE TRIGGER AuditInsert AFTER INSERT
INTO AuditRecords FOR EACH ROW BEGIN
INSERT INTO AuditLog VALUES (NEW.RecordID,
NOW()); END;
```

- A. Syntax error in the INSERT statement
- B. Incorrect trigger event specification
- C. Missing END keyword
- D. All the above

ANSWER: A

298. What's wrong with this trigger?

```
CREATE TRIGGER ValidateCredit BEFORE
INSERT ON Orders FOR EACH ROW BEGIN IF
NEW.Credit > 20000 THEN SET NEW.Credit =
20000; END IF; END;
```

- A. It modifies data during a BEFORE trigger which is not allowed
- B. It should use the AFTER keyword
- C. The IF condition is incorrectly formulated
- D. Syntax is correct

ANSWER: A

299. Which statement is true about updatable views in MySQL?

- A. Views based on multiple tables cannot be updated
- B. Views cannot be updated
- C. Only views created with the WITH CHECK OPTION are updatable
- D. All views are updatable

ANSWER: A

300. How do stored procedures contribute to database security?

- A. By encrypting data automatically
- B. By restricting direct access to data
- C. By logging user actions
- D. By validating user inputs

ANSWER: B

301. What differentiates a deterministic function from a non-deterministic function in MySQL?

- A. Non-deterministic functions cannot be indexed
- B. Non-deterministic functions are faster
- C. Deterministic functions return the same result any time they are called with a specific set of input values
- D. Deterministic functions perform better

ANSWER: C

302. What does this SQL command do:

```
CREATE FUNCTION  
GetCustomerLevel(p_credit DOUBLE)  
RETURNS VARCHAR(20) RETURN CASE  
WHEN p_credit > 40000 THEN 'Platinum'  
WHEN p_credit > 10000 THEN 'Gold' ELSE  
'Silver' END;?
```

- A. Creates a function that returns a customer's level based on credit
- B. Deletes a function
- C. Modifies an existing function
- D. None of the above

ANSWER: A

303. Which of the following is a valid method for defining a route in Laravel?

- A. Route::get()
- B. Route::put()
- C. None of the above
- D. All of the above

ANSWER: D

304. How do you share data with all views in a Laravel application?

- A. Using the View::compose() method
- B. Using the global() method
- C. Using the session() method
- D. Using the share method in the AppServiceProvider

ANSWER: D

305. Which function is used to redirect to another page in Laravel?

- A. route()
- B. redirect()
- C. return()
- D. view()

ANSWER: B

306. What is Laravel's Eloquent?

- A. An ORM (Object-Relational Mapping)
- B. A CSS framework
- C. A JavaScript library
- D. A templating engine

ANSWER: A

307. What is the default session driver in Laravel?

- A. database
- B. cookie
- C. file
- D. redis

ANSWER: C

308. Which method would you use to attach a tag to a post in a many-to-many relationship?

- A. add()
- B. sync()
- C. link()
- D. attach()

ANSWER: D

309. Which of the following commands is used to run a Laravel artisan scheduler?

- A. php artisan scheduler
- B. php schedule
- C. php artisan schedule
- D. php artisan run

ANSWER: C

310. What is the purpose of the AppServiceProvider in Laravel?

- A. To register application services and bind classes to the service container
- B. To configure application routes
- C. To manage database migrations
- D. To handle HTTP middleware

ANSWER: A

311. What is the use of the php artisan down command in Laravel?

- A. To optimize the application
- B. To bring the application online
- C. To migrate the database
- D. To bring the application offline

ANSWER: D

312. How do you define a route parameter in Laravel?

- A. Route::get('/user/{id}')
- B. Route::get('/user')
- C. Route::get('/user[id]')
- D. Route::get('/user')

ANSWER: A

313. What does the hasManyThrough relationship in Laravel represent?

- A. A relationship that allows access to a distant relation via an intermediate relation
- B. A one-to-many relationship
- C. A many-to-many relationship
- D. A relationship with an intermediate table

ANSWER: A

314. What is the purpose of Laravel's @foreach directive in Blade?

- A. To loop through data
- B. To conditionally display content
- C. To include a file
- D. To extend a layout

ANSWER: A

315. What does the php artisan migrate:rollback command do?

- A. Creates a new migration
- B. Applies all pending migrations
- C. Reverts the last database migration
- D. Deletes all migrations

ANSWER: C

316. Which method would you use to remove a pivot table record in a many-to-many relationship?

- A. unlink()
- B. delete()
- C. remove()
- D. detach()

ANSWER: D

317. What is the use of Laravel's blade templating engine?

- A. To compile and cache PHP code
- B. To generate JavaScript code
- C. To provide a simple way to write PHP control structures and statements
- D. To optimize CSS and JS assets

ANSWER: C

318. How do you define a middleware in Laravel?

- A. By using the php artisan make:middleware command
- B. By editing the routes file
- C. By configuring the database settings
- D. By creating a class that implements the Middleware interface

ANSWER: A

319. What is the purpose of the php artisan optimize command in Laravel?

- A. To optimize database queries
- B. To optimize class loading
- C. To generate a new optimized application
- D. To clear all caches

ANSWER: B

320. What is the purpose of the php artisan route:list command?

- A. To list all middleware
- B. To list all artisan commands available
- C. To list all registered routes for the application
- D. To list all active sessions

ANSWER: C

321. Which function is used to generate a URL in Laravel?

- A. url()
- B. make_url()
- C. generate_url()
- D. route()

ANSWER: A

322. In Laravel, which of the following is NOT a valid middleware?

- A. middleware
- B. encrypt
- C. csrf
- D. auth

ANSWER: A

323. What is the purpose of Laravel's php artisan config:cache command?

- A. To clear the configuration cache
- B. To cache the configuration files
- C. To create a cache table
- D. To generate a new config file

ANSWER: B

324. Which of the following is NOT a valid database driver supported by Laravel?

- A. mongodb
- B. sqlite
- C. sqlsrv
- D. pgsql

ANSWER: A

325. What does the compact() function do in a Laravel controller?

- A. Creates an array containing variables and their values
- B. Converts an array into a collection
- C. forms an object into an array
- D. Compacts multiple views into one

ANSWER: A

326. Which command is used to create a seeder in Laravel?

- A. php artisan new
- B. php artisan generate
- C. php artisan create
- D. php artisan make

ANSWER: A

327. What is the purpose of Laravel's @yield directive in Blade templates?

- A. To define a section in a layout
- B. To include a section from a child view
- C. To pass data to a child view
- D. To create a loop in a view

ANSWER: A

328. Consider the following PHP function:

```
function multiply(&$value) {  
    $value *= 2;  
}  
$num = 10;  
multiply($num);
```

What will be the value of \$num after the function call?

- A. Error
- B. Null
- C. 10
- D. 20

ANSWER: D

329. Identify the error in this PHP function definition:

```
function multi($x, $y) {  
    return $x * $y return $x + $y;  
}
```

- A. Multiple return statements
- B. Missing semicolon
- C. Syntax error in return statements
- D. No error in the code

ANSWER: A

330. Spot the mistake in this PHP function:

```
function Sum($arr) {  
    $sum = 0;  
    foreach($arr as $num) {  
        $sum += $num;  
    }  
    return $sum;  
}
```

What will getSum([11, 22, 33]) return?

- A. Nothing, there is a syntax error
- B. 66
- C. Error due to incorrect parameter type
- D. 33

ANSWER: B

331. In PHP, which function is used to count the number of elements in an array?

- A. get_length()
- B. size()
- C. count()
- D. array_size()

ANSWER: C

332. What is the purpose of the explode() function in PHP?

- A. To split a string into an array
- B. To sort an array
- C. To search for a string in an array
- D. To combine array elements into a string

ANSWER: A

333. In PHP, which function is used to join array elements with a string?

- A. merge()
- B. concat()
- C. array_join()
- D. join()

ANSWER: D

334. Which of the following is a correct way to declare a multidimensional array in PHP?

- A. "\$array = array(array(10, 20, 30), array(40, 50, 60));"
- B. "\$array = [array(10, 20, 30), array(40, 50, 60)];"
- C. "\$array = {(10, 20, 30), (40, 50, 60)};"
- D. "\$array = { array(10, 20, 30), array(40, 50, 60)};"

ANSWER: A

335. What will be the output of the following PHP code?

```
"$array = ['a1', 'b1', 'c1']; echo $array[1];"
```

- A. a1
- B. b1
- C. c1
- D. Error

ANSWER: B

336. Consider this PHP code:

```
"$str = "Hello World";"
```

```
"$arr = "Hello World";"
```

```
print_r($array);
```

What does print_r(\$array); output?

- A. Error
- B. Array ([0] => Hello [1] => World)
- C. Array ([0] => H [1] => e [2] => l [3] => l [4] => o [5] => [6] => W [7] => o [8] => r [9] => l [10] => d)
- D. Array ([0] => Hel [1] => lo [2] => Wo [3] => rld)

ANSWER: D

337. What is the keyword used to define a function in PHP?

- A. def
- B. func
- C. function
- D. create

ANSWER: C

338. Spot the mistake in this PHP while loop:

```
$x = 1;  
while ($x <= 10) {  
    echo $x  
}  
$x++;  
?>
```

- A. Infinite loop
- B. Missing increment inside loop
- C. Missing semicolon after echo
- D. Syntax error in while

ANSWER: C

339. Find the error in this PHP code involving a for loop:

```
"for ($i = 0, $i <= 10, $i++) {"  
    echo $i;  
}  
?>
```

- A. Syntax error in for loop
- B. Missing semicolon after echo
- C. No error in the code
- D. Infinite loop

ANSWER: A

340. What is a primary purpose of a function in PHP?

- A. To declare variables
- B. To repeat a block of code multiple times
- C. To organize and reuse code
- D. To stop the execution of a script

ANSWER: C

341. In PHP, what is a function parameter that is given a default value called?

- A. Optional parameter
- B. Static parameter
- C. Dynamic parameter
- D. Mandatory parameter

ANSWER: A

342. What is the scope of a variable declared inside a PHP function?

- A. Universal
- B. Static
- C. Local
- D. Global

ANSWER: C

343. Which of the following statements about PHP anonymous functions is true?

- A. They can be assigned to a variable or passed as an argument
- B. They must have a name
- C. They are a type of PHP class
- D. They cannot use external variables

ANSWER: A

344. What will be the output of this PHP function call?

```
function addition($x, $y) {  
    return $x + $y;  
}  
echo addition(2, 3);
```

- A. 5
- B. 23
- C. Error
- D. Nothing

ANSWER: A

345. Given the PHP function:

```
function isEven($num) {  
    return $num % 2 == 0;  
}
```

What will isEven(6) return?

- A. TRUE
- B. FALSE
- C. 5
- D. null

ANSWER: A

346. In PHP, the switch statement is used as an alternative to which other control structure?

- A. if
- B. if-else
- C. foreach
- D. while

ANSWER: A

347. What is the purpose of the break statement in PHP loops?

- A. To continue loop execution
- B. To pause the loop execution
- C. To skip the current iteration
- D. To exit the loop

ANSWER: B

348. In PHP, what will happen if you forget to increment the counter in a while loop?

- A. The loop will throw an error
- B. The loop will skip iterations
- C. The loop will exit immediately
- D. The loop will run indefinitely

ANSWER: D

349. Which looping structure is best for iterating over an associative array in PHP?

- A. foreach
- B. for
- C. do-while
- D. while

ANSWER: A

350. What will be the output of the following PHP code?

```
$i = 0;
while($i < 6) {
echo $i;
$i++;
}
?>
```

- A. 12345
- B. 12345
- C. 543210
- D. An error

ANSWER: A

351. Consider the following PHP code:

```
for ($i = 1; $i <= 5; $i++) {
if ($i == 4) {
continue;
}
echo $i;
}
?>
```

What will be the output?

- A. 1235
- B. 135
- C. 1234
- D. 12345

ANSWER: A

352. Identify the error in this PHP foreach loop:

```
foreach($item as $value) {
echo $value
}
?>
```

- A. No error in the code
- B. Missing \$ before array
- C. Syntax error in foreach
- D. Missing semicolon after echo

ANSWER: D

353. Which method is used to insert a single document into a MongoDB collection?

- A. db.collection.create()
- B. db.collection.addOne()
- C. db.collection.insert()
- D. db.collection.insertOne()

ANSWER: D

354. What does the upsert option do in an update operation in MongoDB?

- A. Deletes the document if it exists
- B. Updates all matching documents
- C. Inserts a new document if no match is found
- D. Updates an existing document, otherwise does nothing

ANSWER: C

355. What does the find() method in MongoDB return?

- A. A JSON object
- B. A single document
- C. A cursor
- D. An array of documents

ANSWER: C

356. How do you specify an alternate configuration file when starting MongoDB?

- A. `mongod --config /path/to/config`
- B. `mongod --use /path/to/config`
- C. `mongod -c /path/to/config`
- D. `mongod --file /path/to/config`

ANSWER: A

357. What will the following command do?
`db.users.remove({})`

- A. Remove the 'users' collection
- B. Remove one random document
- C. Remove all documents from the 'users' collection
- D. Do nothing

ANSWER: C

358. What does the \$unset operator do in an update operation in MongoDB?

- A. To delete a field from a document
- B. To set a field to null
- C. To create a new field
- D. To hide a field in the output

ANSWER: A

359. Which command is used to update all documents that meet certain criteria in MongoDB?

- A. `db.collection.updateOne()`
- B. `db.collection.updateMany()`
- C. `db.collection.modify()`
- D. `db.collection.update()`

ANSWER: B

360. MongoDB fails to start with error "Address already in use". What is the likely cause?

- A. Insufficient permissions
- B. Port conflict with another application
- C. Corrupted installation
- D. Outdated MongoDB version

ANSWER: B

361. Which CRUD operation is used to add new data to a MongoDB database?

- A. Delete
- B. Update
- C. Insert
- D. Select

ANSWER: C

362. What does this command do?
`db.products.find({price: {$gt: 100}})`

- A. Updates the price of products over 100
- B. Finds products with a price less than 100
- C. Finds products with a price greater than 100
- D. Finds products with a price equal to 100

ANSWER: C

363. What is the purpose of the \$set operator in MongoDB?

- A. To add a new field to an existing document
- B. To modify an existing field
- C. To remove a document
- D. To hide a field from output

ANSWER: A

364. What does 'CRUD' stand for in MongoDB?

- A. Create, Read, Utilize, Deploy
- B. Connect, Read, Unload, Display
- C. Create, Read, Update, Delete
- D. Create, Retrieve, Upload, Delete

ANSWER: C

365. How does MongoDB treat fields that are not specified in the \$set part of an update operation?

- A. They are deleted
- B. They are set to null
- C. They remain unchanged
- D. They are marked as undefined

ANSWER: C

366. Which command is used to start a MongoDB server?

- A. mongo start
- B. run mongod
- C. mongod start
- D. start mongod

ANSWER: C

367. Identify the issue: mongod --start

- A. Incorrect command format
- B. Incorrect file permissions
- C. Missing configuration file
- D. Outdated MongoDB version

ANSWER: A

368. Which MongoDB command is used to add a new field to an existing document?

- A. db.collection.addField({newField: value})
- B. db.collection.update({}, {\$set: {newField: value}})
- C. db.collection.newField({newField: value})
- D. db.collection.add({}, {newField: value})

ANSWER: B

369. Which command is used to create a new Laravel project?

- A. composer create-project --prefer-dist laravel/laravel project-name
- B. php artisan new project-name
- C. laravel create project-name
- D. laravel new project-name

ANSWER: A

370. What is the purpose of Laravel's middleware?

- A. To process HTTP responses
- B. To route HTTP requests
- C. To filter HTTP requests
- D. To handle HTTP requests

ANSWER: C

371. How can you access the value of an environment variable in Laravel?

- A. getenv('VAR_NAME')
- B. \$_ENV['VAR_NAME']
- C. config('app.VAR_NAME')
- D. env('VAR_NAME')

ANSWER: D

372. Which Laravel command is used to clear the route cache?

- A. php artisan cache
- B. php artisan route
- C. php artisan clear-route
- D. php artisan cache-route

ANSWER: B

373. Which file is used to define global helper functions in Laravel?

- A. functions.php
- B. helpers.php
- C. app.php
- D. GlobalHelpers.php

ANSWER: B

374. What is Laravel's service container used for?

- A. Handling database queries
- B. Configuring routes
- C. Managing sessions
- D. Dependency injection

ANSWER: D

375. Which method is used to define a "one-to-one" relationship in Laravel's Eloquent ORM?

- A. belongsToMany()
- B. hasMany()
- C. hasOne()
- D. belongsTo()

ANSWER: C

376. Which function is used to retrieve old input data in Laravel views?

- A. input()
- B. previous()
- C. old()
- D. request()

ANSWER: C

377. Which directory stores the application controllers in Laravel?

- A. app/Http/Controllers
- B. app/Controllers
- C. app/Models
- D. app/Http/Routes

ANSWER: A

378. What is the purpose of Laravel's php artisan migrate command?

- A. To rollback migrations
- B. To create a new migration file
- C. To run the pending migrations
- D. To delete all migration files

ANSWER: C

379. What is the purpose of the php artisan tinker command in Laravel?

- A. To run unit tests
- B. To interact with the application's code in an interactive shell
- C. To generate a new controller
- D. To clear the cache

ANSWER: B

380. What is the default database connection type used by Laravel?

- A. MySQL
- B. SQLite
- C. PostgreSQL
- D. MariaDB

ANSWER: A

381. How can you retrieve the current URL in a Laravel view?

- A. request()->url()
- B. route()
- C. url()
- D. current_url()

ANSWER: A

382. What is the primary use of Laravel's artisan command-line tool?

- A. To manage database migrations
- B. To manage the Laravel application
- C. To create HTTP routes
- D. To create Eloquent models

ANSWER: B

383. What is the purpose of Laravel's CSRF protection?

- A. To prevent SQL injection attacks
- B. To prevent session hijacking attacks
- C. To prevent cross-site scripting (XSS) attacks
- D. To prevent cross-site request forgery (CSRF) attacks

ANSWER: D

384. Which command is used to create a new migration file in Laravel?

- A. php artisan generate create_users_table
- B. php artisan make create_users_table
- C. php artisan create create_users_table
- D. php artisan new create_users_table

ANSWER: B

385. Which method is used to define a "many-to-many" relationship in Laravel?

- A. belongsToMany()
- B. belongsTo()
- C. hasOne()
- D. hasMany()

ANSWER: A

386. Which of the following is NOT a valid HTTP method supported by Laravel routes?

- A. PATCH
- B. CONNECT
- C. DELETE
- D. OPTIONS

ANSWER: B

387. What is wrong with this SQL command:
DELETE FROM Products WHERE;

- A. Unnecessary semicolon
- B. Incomplete WHERE clause
- C. Extra space in statement
- D. Syntax is correct

ANSWER: B

388. Which type of JOIN returns only the rows that have a match in both joined tables?

- A. FULL JOIN
- B. INNER JOIN
- C. LEFT JOIN
- D. RIGHT JOIN

ANSWER: B

389. What does the SQL clause 'ON DUPLICATE KEY UPDATE' do in an INSERT statement?

- A. Deletes the duplicate row
- B. Updates the row if it already exists
- C. Inserts a new row as a duplicate
- D. None of the above

ANSWER: B

390. Which SQL statement is used to read data from a database?

- A. DELETE
- B. UPDATE
- C. INSERT
- D. SELECT

ANSWER: D

391. What is the main purpose of using a JOIN in SQL?

- A. To update records in a table
- B. To merge rows from two or more tables
- C. To delete records from a table
- D. To create a new table

ANSWER: B

392. How does the SQL statement `INSERT INTO Orders (ProductID, Quantity) VALUES (101, 1) ON DUPLICATE KEY UPDATE Quantity = Quantity + 1;` function?

- A. Adds a new order or increases quantity if exists
- B. Creates multiple entries for same product
- C. Deletes previous entries for product
- D. None of the above

ANSWER: A

393. How does enabling the require_secure_transport option in MySQL enhance security?

- A. Increases connection timeout
- B. Forces connections to use SSL/TLS
- C. Disables all database connections
- D. Forces connections to use SSH

ANSWER: B

394. What is the result of the following SQL query?
SELECT COUNT(*) FROM Users;

- A. The list of users
- B. The first user in the table
- C. Total data size of Users
- D. The number of rows in Users

ANSWER: D

395. What does the UPDATE statement do in SQL?

- A. Deletes records
- B. Modifies existing records
- C. Inserts new records
- D. Creates a table

ANSWER: B

396. What is the purpose of the DELETE statement in SQL?

- A. To create a new table
- B. To modify rows
- C. To drop a table
- D. To remove specific rows from a table

ANSWER: D

397. What is incorrect in the following SQL statement? CREATE TABLE Users (ID INT, Name CHAR(20), Email VARHCAR(100));

- A. Syntax is correct
- B. Spelling mistake in data type for Email
- C. Name should be TEXT
- D. ID should be VARCHAR

ANSWER: B

398. Identify the error in this user creation SQL command: CREATE USER 'admin'@'localhost' IDENTIFIED BY password;

- A. Syntax is correct
- B. Password is too simple
- C. Wrong host specified
- D. Missing quotes around 'password'

ANSWER: D

399. Which clause should be used with the DELETE statement to specify which rows to remove?

- A. ORDER BY
- B. GROUP BY
- C. WHERE
- D. HAVING

ANSWER: C

400. Which version of PHP introduced the advanced concepts of OOP?

- A. PHP 5
- B. PHP 4
- C. PHP 6
- D. PHP 5.3

ANSWER: A

401. What does the following SQL statement do? UPDATE Users SET Age = Age + 1 WHERE ID = 1;

- A. Increments age of all users
- B. Increments age of the user with ID 1
- C. Sets all users' age to 1
- D. Deletes user with ID 1

ANSWER: B

402. Identify the mistake in this SQL statement: UPDATE User SET Status = 'Active' WHER ID = 5;

- A. Incorrect column name
- B. Typo in WHERE clause
- C. Both
- D. None of the above

ANSWER: C

403. What is the purpose of the SQL statement below? INSERT INTO Customers (Name, Age) VALUES ('Alice', 30);

- A. Updates a row in Customers
- B. Deletes a row from Customers
- C. None of the above
- D. Inserts a new row into Customers

ANSWER: D

404. Which function is used to determine a file's last access time?

- A. filectime()
- B. fileltime()
- C. fileatime()
- D. filetime()

ANSWER: C

405. Identify the error in this SQL command:
CREATE TABLE Products (ProductID INT, Price
DECIMAL(5));

- A. Price should be an INTEGER
- B. No error
- C. ProductID should be a TEXT
- D. DECIMAL definition is incomplete

ANSWER: D

406. Identify the output of the following PHP program?

```
<?php
$a = 200;
if ($a > 100)
    "printf("PHP Quiz");"
else if ($a > 200)
    "printf("PHP MCQ");"
else if ($a >= 300)
    "printf("PHP Program");"
?>
```

- A. PHP Program
- B. No output
- C. PHP MCQ
- D. PHP Quiz

ANSWER: D

407. Which of the following functions can be used to get the current memory usage?

- A. memory_get_usage()
- B. get_usage()
- C. memory_get_peak_usage()
- D. get_peak_usage()

ANSWER: A

408. Find the output of the following PHP code?

```
<?php
$input = "PHP<td>stands
for</td>Hypertext<i>Preprocessor</i>!";
$input = strip_tags($input,"<i></i>");
echo $input;
?>
```

- A. PHP <td>stands for</td> Hypertext
<i>Preprocessor</i>!
- B. PHP stands for Hypertext <i>Preprocessor</i>!
- C. PHP stands for Hypertext Preprocessor!
- D. PHP stands for Hypertext Preprocessor!

ANSWER: B

409. What does PHP stand for?

- A. PHP stands for Personal Hyper Processor
- B. PHP stands for Hypertext Preprocessor
- C. PHP stands for Preprocessor Home Page
- D. PHP stands for Pretext Hypertext Processor

ANSWER: B

410. A function which starts with __ (double underscore) is known as _____

- A. Inbuilt Function
- B. Magic Function
- C. User Defined Function
- D. Default Function

ANSWER: B

411. Identify the PHP statement will give output as \$x on the screen?

- A. echo "\$x";
- B. echo "/\$x";
- C. echo "\$\$x";
- D. echo "\"\$x";

ANSWER: D

412. Which of the following variables does PHP use to authenticate a user?

- i) \$_SERVER['PHP_AUTH_USER'].
 - ii) \$_SERVER['PHP_AUTH_USERS'].
 - iii) \$_SERVER['PHP_AUTH_PU'].
 - iv) \$_SERVER['PHP_AUTH_PW'].
- A. ii) and iii)
B. i) and iv)
C. ii) and iv)
D. i) and ii)

ANSWER: B

413. Find the output of the following PHP code snippet?

```
<?php
$url = "phpmcq@India.com";
echo ltrim(strstr($url, "@"), "@");
?>
```

- A. phpmcq@
B. India.com
C. php@India.com
D. phpmcq@India.com

ANSWER: B

414. Different looping statements supported by PHP?

- i) for loop
 - ii) while loop
 - iii) do-while loop
 - iv) foreach loop
- A. i), ii) and iii)
B. Only iv)
C. i), ii), iii) and iv)
D. i) and ii)

ANSWER: C

415. How many functions does PHP offer for searching and modifying strings using Perl-compatible regular expressions?

- A. 5
B. 10
C. 8
D. 2

ANSWER: C

416. Which version of PHP deprecated the safe mode feature?

- A. PHP 5.3.0
B. PHP 5.1.0
C. PHP 5.2.0
D. PHP 5.3.1

ANSWER: A

417. Identify the error in the following PHP program:

```
<?php
class Example
{
    public $name;
    function Sample()
    {
        echo "Learn PHP @ India";
    }
}
?>
```

- A. class Example
B. public \$name;
C. function Sample()
D. echo "This is an example";

ANSWER: B

418. Which of the following web servers are required to run the PHP script?

- A. Anyone mentioned above
- B. Apache and PHP
- C. XAMPP
- D. IIS

ANSWER: A

419. What is the purpose of the PHP statement below?

- A. Deletes previous entries
- B. Echoes the message
- C. Adds an element to an array
- D. Updates a variable

ANSWER: B

420. Find the output of the following PHP code?

```
<?php
$x = 50;
$y = 100;
function fun()
{
    $y = $GLOBALS['x'] + $GLOBALS['y'];
}
fun();
echo $y;
?>
```

- A. 50
- B. 100
- C. 150
- D. Error

ANSWER: B

421. Identify the error in this SQL statement:

```
SELECT * FROM Orders INNER JOIN Customers
ON Orders.CustID = Customers.ID WHERE
Customers.Status = 'Active';
```

- A. There is no error
- B. Misuse of JOIN
- C. Syntax error in the WHERE clause
- D. Column name mismatch in the ON clause

ANSWER: A

422. What is the purpose of Laravel's queue system?

- A. To handle background jobs
- B. To manage HTTP requests
- C. To manage database connections
- D. To handle session storage

ANSWER: A

423. What does the following SQL statement accomplish?

```
SELECT * FROM Employees JOIN Departments ON
Employees.DepartmentID =
Departments.DepartmentID;
```

- A. Deletes departments
- B. Retrieves all employees and their department data
- C. Updates employee records
- D. Creates new departments

ANSWER: B

424. What does a FULL OUTER JOIN do?

- A. Combines all rows from both tables where matches exist, filling with NULLs where there is no match
- B. Only returns non-matching rows of both tables
- C. Only combines matching rows
- D. None of the above

ANSWER: A

425. What is incorrect in the following SQL command?
- ```
SELECT FROM Employees, Departments WHERE
Employees.DepartmentID = Department.ID;
```
- A. SELECT clause is incomplete
  - B. WHERE clause is incorrect
  - C. Syntax is correct
  - D. Using WHERE instead of ON

ANSWER: A

426. Which SQL keyword is used to create a subquery?
- A. IN
  - B. WITH
  - C. SELECT
  - D. SUB

ANSWER: C

427. Which version of PHP introduced the advanced concepts of OOP?
- A. PHP 6
  - B. PHP 5.2
  - C. PHP 5
  - D. PHP 5.3

ANSWER: C

428. Find the output of the following PHP code?

```
<?php
$x = 40;
$y = 30;
$z = 10;
$z = $z + $x + $y;
echo "$z";
?>
```

- A. 150
- B. 80
- C. 10
- D. \$z

ANSWER: B

429. Find the output of the following PHP program?

```
<?php
$a = "$winner";
$b = "/$looser";
echo $a,$b;
?>
A. /
B. $looser
C. /$looser
D. $winner/$looser
```

ANSWER: D

430. Which one of the following is the default PHP session name?
- A. PHPSESSIONID
  - B. PHPIDSESS
  - C. PHPSESSID
  - D. PHPSESID

ANSWER: C

431. Find the output of the following PHP program?

```
<?php
"define("VAR_NAME","test1");"
"${VAR_NAME} = "value1";"
echo VAR_NAME;
echo ${VAR_NAME};
?>
```

- A. test1test1
- B. test1value1
- C. error, constant value cannot be changed
- D. test1

ANSWER: B

432. Find the output of the following PHP program?

```
<?php
$m = 1;
switch(print $m)
{
case 2:
print "HTML";
break;
case 1:
print "CSS";
break;
default:
print "JavaScript";
}
?>
```

- A. error
- B. 1HTML
- C. 1JavaScript
- D. 1CSS

ANSWER: D

433. Which function displays the web page's most recent modification date?

- A. getlastmod()
- B. get\_last\_mod()
- C. lastmod()
- D. last\_mod()

ANSWER: A

434. Identify the variable used to collect form data sent with both the GET and POST methods?

- A. \$\_BOTH
- B. \$REQUEST
- C. \$\_REQUEST
- D. \$BOTH

ANSWER: C

435. Find the output of the following PHP program?

```
<?php
$i = 5;
while (--$i > 0 && ++$i)
{
print $i;
}
?>
```

- A. 55555555...infinitely
- B. 54321
- C. error
- D. 5

ANSWER: A

436. Find the output of the following PHP code?

```
<?php
function constant()
{
"define("GREETING", "Welcome to India",true);"
echo greeting;
}
?>
```

- A. GREETING
- B. Welcome to India
- C. ERROR
- D. greeting

ANSWER: B

437. Find the output of the following PHP program?

```
<?php
"$x = array("Array", "Function", "Strings", "File");"
echo pos($x);
?>
```

- A. Function
- B. File
- C. Strings
- D. Array

ANSWER: D

438. If \$a = 120 what will be returned when (\$a == 120) ? 5 : 1 is executed?

- A. 1
- B. 5
- C. 120
- D. Error

ANSWER: B

439. Identify the issue in this PHP code:

```
$str = 'Hello'; echo $str[12];
```

- A. Trying to access an undefined index
- B. Syntax error
- C. No error, it will print 'Hello'
- D. It will print a space

ANSWER: A

440. Find the error in the following PHP code:

```
"$arr = array("one", "two", "three");"
foreach ($x as $val) {
 echo $val;
}
```

- A. Typo in the variable name inside foreach
- B. Syntax error in array declaration
- C. No error in the code
- D. Error in echo statement

ANSWER: A

441. Which keyword is used to declare a class in PHP?

- A. class
- B. object
- C. new
- D. struct

ANSWER: A

442. Define the purpose of the \_\_construct() method in a PHP class?

- A. To configure a server
- B. To create an object from the class
- C. To initialize an object's properties
- D. To delete an object

ANSWER: C

443. In PHP, which keyword is used to inherit a class from another class?

- A. extends
- B. inherits
- C. uses
- D. implements

ANSWER: A

444. What does the final keyword signify when applied to a method in PHP?

- A. The method cannot be overridden
- B. The method is the last in the class
- C. The method is static
- D. The method is the most important in the class

ANSWER: A

445. How is a static property accessed in a PHP class?

- A. With the -> operator
- B. Using the class name and ::
- C. With the new keyword
- D. Using the \$this keyword

ANSWER: B



446. Find the output of the following PHP code?

```
class Test {
 public $prop = 'Morning';
}
$obj = new Test();
echo $obj->prop;
A. Morning
B. Test
C. prop
D. Error
```

ANSWER: A

447. Consider the PHP class and find the output:

```
class Circle {
 private $radius;
 public function __construct($r) {
 $this->radius = $r;
 }
 public function getArea() {
 return pi() * $this->radius * $this->radius;
 }
}
$circle = new Circle(3);
echo $circle->getArea();
A. The area of a circle with radius 3
B. Syntax error
C. No output
D. Error due to private property access
```

ANSWER: A

448. Identify the output of the following code:

```
class Animal {
 "protected $sound = "No sound";"
 public function makeSound() {
 return $this->sound;
 }
}
class Dog extends Animal {
 "protected $sound = "Bark";"
}
$dog = new Dog();
echo $dog->makeSound();
A. Bark
B. No sound
C. Error
D. Dog
```

ANSWER: A

449. Identify the error in the following PHP class definition:

```
class Car {
 function __construct() {
 $this->model = "";
 }
 public function getModel() {
 return model;
 }
}
A. Undefined variable model
B. Syntax error in constructor
C. Missing property declaration
D. No error in the code
```

ANSWER: A

450. Find the mistake in this PHP code involving object-oriented principles:

```
class Movie { public $title; public function
__construct(title) { $this->title = title; } }
```

- A. Missing \$ before parameter in constructor
- B. Syntax error in property declaration
- C. No error in the code
- D. Error in method definition

ANSWER: A

451. Which operator is used at the beginning of an expression to suppress error messages that it may generate in PHP?

- A. @
- B. #
- C. \$
- D. !

ANSWER: A

452. What is the use of the try and catch block in PHP?

- A. To detect and handle syntax errors
- B. To manage program flow
- C. To handle exceptions and errors
- D. To debug code

ANSWER: C

453. Which function is used to set a custom error handler?

- A. set\_error\_handler()
- B. error\_report()
- C. handle\_error()
- D. trigger\_error()

ANSWER: A

454. What is the difference between exceptions and errors in PHP?

- A. Exceptions can be caught and handled, errors cannot
- B. Errors are for system-level issues, exceptions are for script issues
- C. Exceptions are fatal, errors are not
- D. There is no difference

ANSWER: A

455. What will happen if an exception is not caught in PHP?

- A. The script will continue running
- B. A fatal error will occur
- C. The exception will be ignored
- D. The script will pause

ANSWER: B

456. Consider the following code:

```
$num = -1;

try {
 if($num < 0) {
 throw new Exception("Negative number");
 }
}

} catch (Exception $e) {
 echo $e->getMessage();
}
```

What will be output?

- A. Negative number
- B. Nothing
- C. Exception in script
- D. Error

ANSWER: A

457. Identify the error in this PHP error handling code:

```
try {
 //code
} catch() {
 echo "Error popped";
}
```

- A. Empty catch block
- B. Missing exception type in catch block
- C. Syntax error in try block
- D. No error in the code

ANSWER: B

458. Spot the mistake in this PHP exception handling:

```
try {
 $value = 10/0;
}
catch (Exception $e) {
 echo "Caught exception: ", $e->getMessage();
}
```

- A. Dividing by zero is not caught
- B. Incorrect message concatenation
- C. No mistake, it will catch and display the exception
- D. The variable \$e is not defined

ANSWER: A

459. In PHP, which function is used to open a file?

- A. fopen()
- B. open\_file()
- C. file\_open()
- D. open()

ANSWER: A

460. Which file mode in PHP can be used to open a file for both reading and writing, and places the file pointer at the beginning?

- A. r+
- B. w+
- C. a+
- D. x+

ANSWER: A

461. What does the PHP file\_get\_contents() function do?

- A. Reads the entire file into a string
- B. Deletes the specified file
- C. Creates a new file
- D. Writes content to a file

ANSWER: A

462. In PHP, how do you check if a file exists and is readable?

- A. Using is\_readable() and file\_exists()
- B. Using file\_exists()
- C. Using can\_read()
- D. Using fopen() and checking if it's false

ANSWER: A

463. What is the result of the following PHP code?

```
$file = fopen("test.txt", "w"); fwrite($file, "Hello, India!"); fclose($file);
```

- A. A new file named "test.txt" is created with "Hello, India!" inside
- B. An error occurs
- C. Nothing happens
- D. The file "test.txt" is deleted

ANSWER: A

464. In PHP, what does the `file_put_contents()` function do when the `FILE_APPEND` flag is used?
- A. Replaces the content of the file
  - B. Deletes the file and creates a new one
  - C. Appends content to the end of the file
  - D. Creates a new file

ANSWER: C

465. Identify the error in this PHP file handling code:

```
"$file = fopen("nonexistent.txt", "r"); fwrite($file, "Data"); fclose($file);"
```

- A. The file does not exist
- B. Incorrect mode for `fwrite`
- C. Syntax error
- D. No error in the code

ANSWER: B

466. Spot the mistake in this PHP code for reading a file:

```
$file = fopen("file.txt", "r");
$data = fread($file, filesize("file.txt"));
fclose($file); echo $data;
```

- A. There is no mistake
- B. Missing error handling for file opening
- C. Incorrect use of `filesize()`
- D. The file is not closed properly

ANSWER: B

467. What is the primary purpose of using prepared statements in PHP?

- A. To optimize query execution speed
- B. To improve code readability
- C. To protect against SQL injection attacks
- D. To handle large datasets

ANSWER: C

468. In a PHP script using MySQLi, what does the `close()` method do when applied to a `mysqli` object?

- A. Closes the database connection
- B. Saves changes to the database
- C. Closes the PHP script
- D. Resets all variables in the script

ANSWER: A

469. Identify the error in the following PHP code:

```
$mysqli = new mysqli("localhost", "user", "password", "database");
$result = $mysqli->query("SELECT * FROM users WHERE id = 'Sid'");
```

- A. No error in the code
- B. Missing database connection error handling
- C. Improper string concatenation in the query
- D. SQL injection vulnerability

ANSWER: D

470. Which PHP statement is used to execute the same code a specified number of times?

- A. `foreach`
- B. `while`
- C. `for`
- D. `do-while`

ANSWER: C

471. What type of index would be most effective for a column that stores unique values in MySQL?

- A. Primary index
- B. Secondary index
- C. Clustered index
- D. Non-clustered index

ANSWER: A

472. Which MySQL engine supports FULLTEXT indexing?

- A. MyISAM
- B. InnoDB
- C. Both
- D. Neither

ANSWER: A

473. When is a composite index useful in MySQL?

- A. When querying multiple columns frequently
- B. Only with the PRIMARY KEY
- C. For single-column searches
- D. Never

ANSWER: A

474. What does the following SQL command do?

```
CREATE INDEX idx_name ON Customers (Name);
```

- A. Creates a unique constraint on Name
- B. Deletes an index on Name
- C. Creates an index on the Name column
- D. Alters the Name column

ANSWER: C

475. How does the query optimizer use indexes in MySQL?

- A. To decide the best order to join tables
- B. To reduce the use of disk space
- C. To increase transaction speed
- D. To automatically update table statistics

ANSWER: A

476. What is the effect of adding an index to a table on the performance of INSERT statements?

- A. Slows down INSERTs
- B. Speeds up INSERTs
- C. No effect on INSERTs
- D. INSERTs become unpredictable

ANSWER: A

477. Identify the error in this SQL statement:

```
CREATE INDEX ON Orders (OrderDate);
```

- A. Missing index name
- B. Syntax is correct
- C. Should be a UNIQUE index
- D. No column specified

ANSWER: A

478. What is wrong with this SQL command:

```
CREATE INDEX idx_product_id ON Products
(ProductID, WHERE ProductID IS NULL;
```

- A. MySQL does not support filtered indexes
- B. Index name is incorrect
- C. Syntax error in WHERE clause
- D. All are correct

ANSWER: A

479. Spot the error in this SQL statement:

```
"CREATE VIEW SalesSummary AS SELECT
ProductID, SUM(Quantity) FROM Sales GROUP BY
ProductID HAVING SUM(Quantity) > 100;"
```

- A. Missing alias for SUM(Quantity)
- B. Syntax is correct
- C. HAVING clause is unnecessary
- D. Grouping by ProductID is not allowed

ANSWER: A

480. What is a transaction in database management?

- A. A group of SQL queries executed individually
- B. A group of SQL queries executed as a single unit of work
- C. A single SQL query
- D. A schema in the database

ANSWER: B



481. Which statement is used to start a transaction in MySQL?

- A. BEGIN TRANSACTION
- B. START TRANSACTION
- C. INITIATE TRANSACTION
- D. BEGIN

ANSWER: B

482. What does the COMMIT statement do in SQL?

- A. Reverts the current transaction
- B. Starts a new transaction
- C. Saves the changes made by the current transaction
- D. Checks the integrity of the transaction

ANSWER: C

483. What is a pipeline in MongoDB?

- A. A set of data processing steps for transforming data
- B. A mechanism for parallelizing data processing
- C. A technique for optimizing data transfer
- D. A method for error handling in data processing

ANSWER: A

484. How does MongoDB handle data backups?

- A. Through manual file-system level backups
- B. By providing point-in-time recovery capabilities
- C. With continuous data replication to a backup server
- D. All of the above

ANSWER: D

485. What is the role of the ROLLBACK statement in a transaction?

- A. To duplicate the transaction
- B. To save the transaction
- C. To undo the transaction if an error occurs
- D. To start over the database connection

ANSWER: C

486. In which case would you use the SAVEPOINT statement in a transaction?

- A. To save the transaction to disk
- B. To mark a specific point within a transaction to which you later might rollback
- C. To split the transaction
- D. To end the transaction

ANSWER: B

487. How does a transaction ensure data integrity?

- A. By locking the database
- B. By allowing multiple users to modify data simultaneously
- C. By ensuring all parts of the transaction succeed or fail together
- D. By prioritizing transactions

ANSWER: C

488. What is the effect of this SQL command?

SET AUTOCOMMIT = 0;

- A. Turns off automatic execution of statements
- B. Turns on automatic saving of the transaction
- C. Disables the transaction log
- D. Turns off automatic committing of transactions

ANSWER: D

489. What is the outcome?

- A. The order is permanently added to the database
- B. The order is not added to the database
- C. The order data is corrupted
- D. A new transaction is started

ANSWER: B

490. How do transactions affect performance in a database system?

- A. They slow down database operations due to locking mechanisms
- B. They generally speed up database operations
- C. They have no impact on performance
- D. They improve data integrity without affecting performance

ANSWER: A

491. Identify the error in this SQL transaction sequence:

`BEGIN; UPDATE Account SET Balance = Balance - 100 WHERE ID = 1; COMMIT;`

- A. Incorrect use of BEGIN for starting a transaction
- B. Syntax error in UPDATE statement
- C. COMMIT does not save the changes
- D. No error

ANSWER: A

492. What is wrong with this transaction sequence?

`START TRANSACTION; DELETE FROM Orders; COMMIT;`

- A. Missing WHERE clause in DELETE statement, potentially dangerous
- B. No error
- C. COMMIT should be ROLLBACK
- D. DELETE statement syntax error

ANSWER: A

493. What is the purpose of using SSL in MySQL connections?

- A. To speed up the connection
- B. To compress data before transmission
- C. To encrypt data during transmission
- D. To log connection activities

ANSWER: C

494. What does the MySQL SECURITY command do when applied to a view?

- A. Changes the view's charset
- B. Sets who can access the view
- C. Deletes the view after a certain period
- D. Modifies the view's collation setting

ANSWER: B

495. How can you restrict user access to specific columns in a MySQL table?

- A. By setting column-level privileges
- B. By deleting unwanted columns
- C. By using table-level firewalls
- D. By encrypting specific columns

ANSWER: A

496. What is the primary benefit of implementing database auditing in MySQL?

- A. To increase data retrieval speed
- B. To monitor and log database activity
- C. To reduce database size
- D. To automatically fix database errors

ANSWER: B

497. What does this SQL command achieve?

`REVOKE ALL PRIVILEGES ON database.* FROM 'user'@'localhost';`

- A. Grants all privileges to a user
- B. Removes all privileges from a user for a database
- C. Changes the user's password
- D. None of the above

ANSWER: B

498. What's wrong with using the following SQL statement for password management?

```
SET PASSWORD FOR 'user'@'localhost' =
PASSWORD('open_sesame');
```

- A. Depreciated method for setting passwords
- B. Syntax error
- C. No error
- D. Incorrect hostname usage

ANSWER: A

499. What is the purpose of the mysqldump utility?

- A. To compress MySQL databases
- B. To replicate databases
- C. To back up MySQL databases
- D. To optimize MySQL databases

ANSWER: C

500. What type of backup involves copying only the data changed since the last full backup?

- A. Incremental backup
- B. Full backup
- C. Mirror backup
- D. Snapshot backup

ANSWER: A

501. What is a stored procedure in MySQL?

- A. A collection of SQL queries executed as a single query
- B. A user-defined function that stores data
- C. A method to backup databases
- D. A protocol for MySQL communication

ANSWER: A

502. Which statement is true about point-in-time recovery in MySQL?

- A. It requires binary logging to be enabled
- B. It can only restore data deleted by mistake
- C. It's only possible with mysqldump
- D. It is automatically enabled in MySQL

ANSWER: A

503. Main advantage of using physical backups over logical backups in MySQL?

- A. Faster restoration times
- B. More secure
- C. Smaller backup files
- D. Easier to configure

ANSWER: A

504. What does the following command do?

```
mysqladmin -u root -p flush-logs
```

- A. Deletes all logs
- B. Creates a new log file by closing and reopening the log files
- C. Restarts the MySQL server
- D. Changes log file permissions

ANSWER: B

505. How will you restore a MySQL database from a dump file created by mysqldump?

- A. `mysql -u user -p database < dump.sql`
- B. `mysqldump -u user -p database < dump.sql`
- C. `mysqladmin -u user -p database < dump.sql`
- D. `mysqlrestore -u user -p database < dump.sql`

ANSWER: A

506. What is the impact of enabling the --single-transaction option during a mysqldump of an InnoDB database?

- A. Creates a new transaction for each table
- B. Locks the entire database during the dump
- C. Creates a consistent snapshot without locking tables
- D. Disables logging during the dump

ANSWER: C

507. Identify the error in this backup command:

```
mysqldump -u root -p --all-databases > backup.sql
```

- A. Incorrect redirection for output
- B. Syntax error in options
- C. No error
- D. Incorrect user credentials

ANSWER: C

508. What's wrong with using the following command for a backup?

```
mysqldump -u root --all-databases --quick > backup.sql
```

- A. The --quick option is not appropriate for all databases
- B. No error
- C. The command should not use redirection
- D. The command lacks password authentication

ANSWER: D

509. What is load balancing in the context of MySQL?

- A. Distributing user requests across multiple servers
- B. Splitting databases across servers
- C. Replicating databases across multiple locations
- D. Synchronizing data across servers

ANSWER: A

510. What is the primary advantage of using stored procedures?

- A. Increased security
- B. Reduced network traffic and higher performance
- C. Automatic data backup
- D. Simplified syntax

ANSWER: B

511. "In MySQL, how can you pass a parameter to a stored procedure?"

- A. By using the IN keyword
- B. By declaring it outside the procedure
- C. By using the OUT keyword
- D. By using the DECLARE keyword

ANSWER: A

512. Which of the following is NOT a characteristic of functions in MySQL?

- A. Can perform updates on tables
- B. Can be used in SQL expressions
- C. Can return only one value
- D. Can be called from within SQL

ANSWER: A

513. OUT parameter in a stored procedure is used for ?

- A. To send data into a procedure
- B. To return data from the procedure to the caller
- C. To declare variable types
- D. To specify optional parameters

ANSWER: B

514. Which Laravel feature is used to broadcast events to a WebSocket?

- A. Laravel Nova
- B. Laravel Echo
- C. Laravel Mix
- D. Laravel Vapor

ANSWER: B

515. What is the primary purpose of an index in a database?

- A. To increase database size
- B. To enhance data security
- C. To speed up data retrieval
- D. To transform data

ANSWER: C

516. In SQL, a subquery can be placed in which of the following clauses?

- A. FROM
- B. WHERE
- C. SELECT
- D. All of the above

ANSWER: D

517. Which method in Laravel Eloquent is used to eager load relationships?

- A. with()
- B. load()
- C. eagerLoad()
- D. attach()

ANSWER: A

518. Consider this SQL statement:

```
SELECT Name, Product FROM Customers LEFT
JOIN Orders ON Customers.CustomerID =
Orders.CustomerID WHERE Orders.OrderID IS
NULL;
```

What does this query return?

- A. Names and products of customers who have not placed any orders
- B. All customers and their orders
- C. All customer and order pairs
- D. Invalid query

ANSWER: A

519. Which of the following directories is used to store views in a Laravel application?

- A. public/views
- B. resources/views
- C. storage/views
- D. app/Views

ANSWER: B

520. Which of the following commands is used to create a new controller class in Laravel?

- A. To rename a controller class
- B. To remove a controller class
- C. To update an existing controller
- D. php artisan make:controller

ANSWER: D

521. Which type of subquery is executed once for each row processed by the parent query?

- A. Non-correlated
- B. Correlated
- C. Repeated
- D. Static

ANSWER: B

522. What does the php artisan make:controller command do?

- A. To create a new controller class
- B. To update an existing controller
- C. To remove a controller class
- D. To rename a controller class

ANSWER: A



523. What does this SQL query achieve?

```
SELECT EmployeeID, MAX(Salary) FROM
Employees GROUP BY DepartmentID HAVING
COUNT(EmployeeID. > 1;
```

- A. Retrieves the highest salary in each department with more than one employee
- B. Deletes entries with max salaries
- C. Lists all employees' salaries
- D. None of the above

ANSWER: A

524. Which of the following is required to install MongoDB?

- A. None of these
- B. Java Runtime Environment
- C. Python
- D. Node.js

ANSWER: A

525. What is the default port for MongoDB server?

- A. 27017
- B. 27015
- C. 28017
- D. 27018

ANSWER: A

527. Which file format is used for MongoDB configuration?

- A. INI
- B. YAML
- C. JSON
- D. XML

ANSWER: B

528. Which operating system is NOT supported by MongoDB?

- A. iOS
- B. Windows
- C. Linux
- D. macOS

ANSWER: A

529. In MongoDB, what is the role of the mongod process?

- A. Handles replication
- B. Manages client connections
- C. Manages the database
- D. Runs the shell interface

ANSWER: C

526. What is the primary function of the mongo shell?

- A. User authentication
- B. Server monitoring
- C. Data backup
- D. Database management and querying

ANSWER: D

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