All mysql database commands that we use in php

In PHP, you can interact with MySQL databases using a variety of database commands, often facilitated through the MySQLi or PDO (PHP Data Objects) extension. Below is a list of commonly used MySQL database commands and operations in PHP:

1. Connecting to a MySQL Database:

mysqli_connect() or new PDO(): Establish a connection to the MySQL database.

2. Selecting a Database:

mysqli_select_db(): Select a specific database to work with.

3. Executing SQL Queries:

• mysqli_query() or PDO's prepared statements: Execute SQL queries.

4. Fetching Data:

 mysqli_fetch_array(), mysqli_fetch_assoc(), mysqli_fetch_row(), or PDO fetch methods: Retrieve data from query results.

5. **Inserting Data:**

• INSERT INTO table_name (column1, column2, ...) VALUES (value1, value2, ...);: Insert data into a table.

6. Updating Data:

• UPDATE table_name SET column1 = value1, column2 = value2 WHERE condition;: Update existing data in a table.

7. Deleting Data:

• **DELETE FROM table_name WHERE condition;**: Delete data from a table.

8. Prepared Statements (to prevent SQL injection):

• mysqli_prepare() and mysqli_stmt_bind_param() for MySQLi, or PDO prepared statements: Prepare and execute SQL queries with placeholders for data.

9. Fetching Multiple Rows:

• Use loops (e.g., **while** or **foreach**) in combination with fetch functions to retrieve multiple rows from a query.

10. Transaction Management:

• mysqli_begin_transaction(), mysqli_commit(), mysqli_rollback(), or PDO transaction methods: Manage database transactions.

11. Error Handling:

mysqli_error() or PDO error handling: Handle database errors.

12. Closing the Database Connection:

• mysqli_close() or PDO's connection close method: Close the database connection when you're done.

13. Fetching the Number of Rows:

mysqli_num_rows(): Get the number of rows in a result set.

14. Getting the Last Inserted ID:

• mysqli_insert_id(): Retrieve the auto-generated ID from the last INSERT query.

15. Escaping Data:

• mysqli_real_escape_string() or prepared statements with placeholders: Safely escape data to prevent SQL injection.

16. Fetching Field Metadata:

• mysqli_fetch_field(): Retrieve information about fields in a result set.

17. Executing Stored Procedures:

• Use mysqli_query() or prepared statements to execute MySQL stored procedures.

18. Executing Custom Functions:

• Call MySQL custom functions using SQL queries.

Here's a basic example of how you might use some of these commands in PHP to connect to a MySQL database, execute a query, and fetch data:

```
<?php
$hostname = "localhost";
$username = "your_username";
$password = "your_password";
$database = "your_database";
// Create a connection
$conn = mysqli_connect($hostname, $username, $password, $database);
if (!$conn) {
    die("Connection failed: " . mysqli_connect_error());
}
// Execute a query
$sql = "SELECT * FROM your_table";
$result = mysqli_query($conn, $sql);
if (mysqli_num_rows($result) > 0) {
    // Fetch and display data
```

```
while ($row = mysqli_fetch_assoc($result)) {
    echo "ID: " . $row["id"] . " - Name: " . $row["name"] . "<br>";
}
else {
    echo "No results found.";
}
// Close the connection
mysqli_close($conn);
?>
```