Complete PHP PDO Tutorial

1. Connecting to MySQL using PDO:

```php
$pdo = new PDO("mysql:host=localhost;dbname=test_db", "root", "");
$pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
```

2. Insert Data using Prepared Statements:

```php
$sql = "INSERT INTO users (name, email) VALUES (:name, :email)";
$stmt = $pdo->prepare($sql);
$stmt->execute([':name' => 'John Doe', ':email' => 'john@example.com']);
```

3. Fetching Data:

```php
$sql = "SELECT * FROM users";
$stmt = $pdo->query($sql);
$data = $stmt->fetchAll(PDO::FETCH_ASSOC);
print_r($data);
```

4. Update Data:

```php
$sql = "UPDATE users SET email = :email WHERE name = :name";
$stmt = $pdo->prepare($sql);
$stmt->execute([':email' => 'new@example.com', ':name' => 'John Doe']);
```

5. Delete Data:

```php
$sql = "DELETE FROM users WHERE name = :name";
$stmt = $pdo->prepare($sql);
$stmt->execute([':name' => 'John Doe']);
```

6. Using Transactions:

```php
try {
    $pdo->beginTransaction();
```

```php
    $stmt1 = $pdo->prepare("UPDATE users SET email = :email WHERE name = :name");

    $stmt1->execute([':email' => 'trans@example.com', ':name' => 'John']);

    $pdo->commit();
} catch (Exception $e) {

    $pdo->rollBack();

    echo "Transaction failed: " . $e->getMessage();

}
```

7. Error Handling:

```php
try {

    $pdo = new PDO("mysql:host=localhost;dbname=test_db", "root", "");

    $pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);

} catch (PDOException $e) {

    echo "Database error: " . $e->getMessage();

}
```

8. Closing the Connection:

```php
$pdo = null;
```