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Problem Statement 20
Implement MYSQL database connectivity with PHP.
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Steps for Ubuntu
///////Install MySQL:

sudo apt update
sudo apt install mysql-server


/////////Secure MySQL Installation:

sudo mysql_secure_installation

////////Install PHP and PHP MySQL Extension:

sudo apt install php php-mysql


///////Configure MySQL (if needed): Start the MySQL service:

sudo systemctl start MySQL


/////Log in to MySQL and create a test database and user:

sudo mysql -u root -p


////Inside MySQL:

CREATE DATABASE testdb;
CREATE USER 'testuser'@'localhost' IDENTIFIED BY 'password';
GRANT ALL PRIVILEGES ON testdb.* TO 'testuser'@'localhost';
FLUSH PRIVILEGES;
EXIT;


//////////Write PHP Code for MySQL Connectivity: Create a PHP file (dbconnect.php)
with the following code:

<?php
$servername = "localhost";
$username = "testuser";
$password = "password";
$dbname = "testdb";

// Create connection

$conn = new mysqli($servername, $username, $password, $dbname);

////// Check connection
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
echo "Connected successfully";
?>
```

/////////Test PHP Code: Place dbconnect.php in the web server directory:

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sudo mv dbconnect.php /var/www/html/
```

//////////Restart the web server:

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sudo systemctl restart apache2
```

//////Open a browser and go to http://localhost/dbconnect.php to see if it displays Connected successfully.

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Steps for Windows

Install XAMPP:

Download and install XAMPP (which includes MySQL and PHP) on Windows.
Start Apache and MySQL:

Open the XAMPP Control Panel and click "Start" next to both Apache and MySQL.
Create a MySQL Database and User:

Open phpMyAdmin by visiting http://localhost/phpmyadmin in your browser.
In phpMyAdmin, create a new database (testdb), and a user (testuser) with a password (password).
Grant the user all privileges on the testdb database.
Write PHP Code for MySQL Connectivity:

//////////Open a text editor and create a PHP file (dbconnect.php) with the following code:

```php
<?php
$servername = "localhost";
$username = "testuser";
$password = "password";
$dbname = "testdb";

// Create connection
$conn = new mysqli($servername, $username, $password, $dbname);

// Check connection
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
echo "Connected successfully";
?>
```

///////////Test PHP Code:

Save dbconnect.php in the htdocs folder, typically found at C:\xampp\htdocs\.
Open a browser and go to http://localhost/dbconnect.php.
If the connection is successful, you should see Connected successfully displayed on the page.