Database Access

PHP to MySql Database connection in WAMP Server

- you must be install any **XAMPP or WAMP or MAMP** kind of software on your laptop or computer. With this software, you will get a local webserver i.e. Apache, PHP language, and MySQL database.

- WAMP is an acronym formed from the initials of the operating system Microsoft Windows and the principal components of the package: Apache, MySQL and one of PHP, Perl or Python.

- Apache is a web server.

- MySQL is an open-source database.

- PHP, Perl and Python are scripting languages that can manipulate information held in a database and generate web pages dynamically each time content is requested by a browser.

- Other programs may also be included in a package, such as phpMyAdmin which provides a graphical user interface for the MySQL database manager.

Procedure to Create webpage, Connect to database and Inserting data.

- Install Wamp Server on PC.
- Now Start the Wamp Server.
- Go to browser and type localhost:80/phpmyadmin.

Set the username as **root** and make empty password column and hit go. The admin pag
window will open like the following,

Select database tab and now create database by entering database name.

Now your database will present at left side php mydmin page,

phpMyAdmin

Current server:

MySQL

Recent   Favorites

- New
- information_schema
- mysql
- performance_schema
- phpdatabase
- student
- sys
- wp_project

Server: MySQL:3308 » Database: student

Structure SQL Search Query Export Import Operations Privileges Routines Events

Table name: | info | Add | 1 | column(s) Go

Structure

Name	Type	Length/Values	Default	Collation	Attributes	Null
first	VARCHAR	20	None		first	☐
last	VARCHAR	20	None		last	☐

Table comments: **Collation:**   **Storage Engine:**

| | | MyISAM |

PARTITION definition:

Partition by: | | (| Expression or column list |)

Partitions: | |

Preview SQL   Save

phpMyAdmin

Current server:

MySQL

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  - New
  - info
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- wp_project

Server: MySQL:3308 » Database: student » Table: info

| Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers |

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	**first**	varchar(20)	utf8mb4_0900_ai_ci		No	*None*			✎ Change	⊝ Drop	More
☐	2	**last**	varchar(20)	utf8mb4_0900_ai_ci		No	*None*			✎ Change	⊝ Drop	More

↑ ☐ Check all *With selected:* 📋 Browse ✎ Change ⊝ Drop 🔑 Primary 🗍 Unique 📇 Index 🔲 Spatial 🔤 Fulltext

🖨 Print 📋 Move columns 🔧 Normalize

📋 Add 1 column(s) after last Go
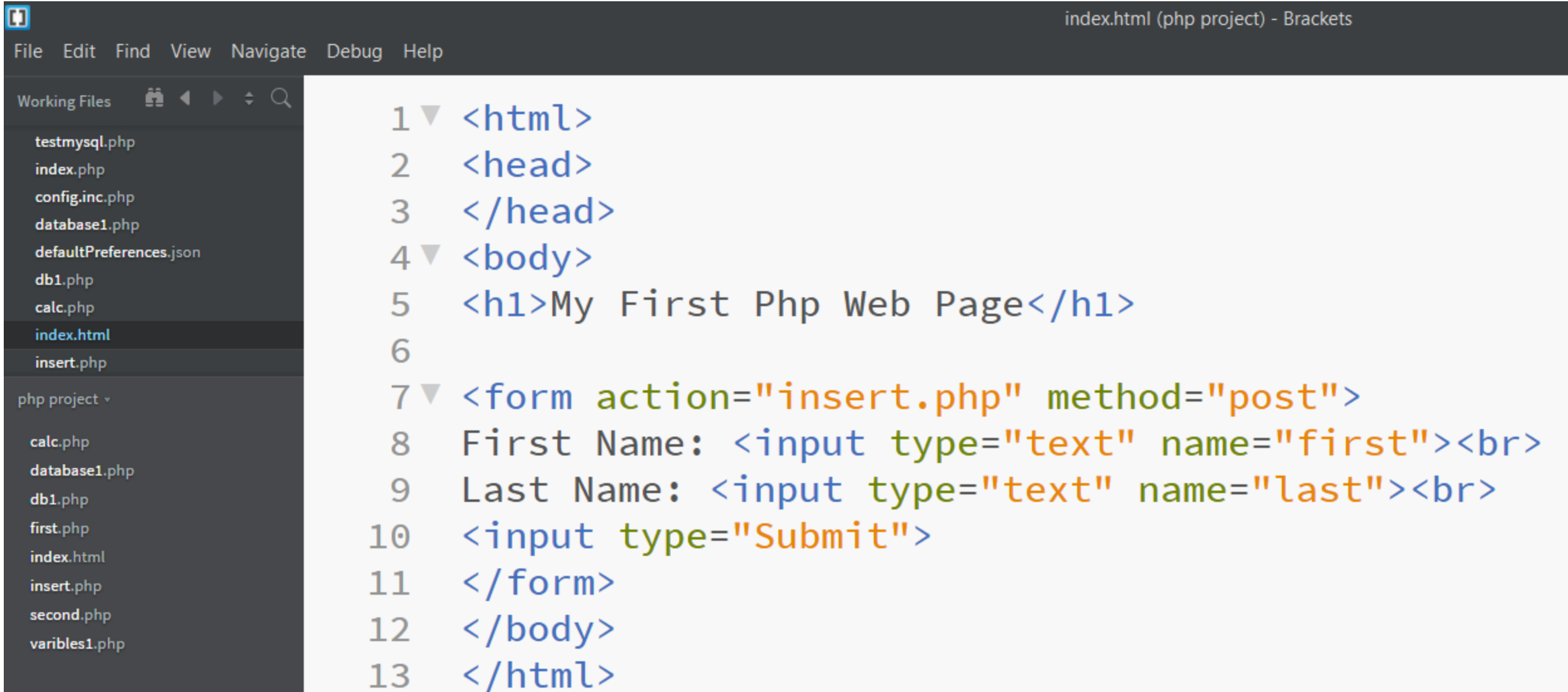
Indexes ⓘ

⚠ No index defined!

Create an index on 1 columns Go

Partitions ⓘ

Insert form data into mysqli Procedural

File   Edit   Find   View   Navigate   Debug   Help

Working Files

testmysql.php
index.php
config.inc.php
database1.php
defaultPreferences.json
db1.php
calc.php
index.html
insert.php

php project ▾

calc.php
database1.php
db1.php
first.php
index.html
insert.php
second.php
varibles1.php

```html
1  <html>
2  <head>
3  </head>
4  <body>
5  <h1>My First Php Web Page</h1>
6
7  <form action="insert.php" method="post">
8  First Name: <input type="text" name="first"><br>
9  Last Name: <input type="text" name="last"><br>
10 <input type="Submit">
11 </form>
12 </body>
13 </html>
```

File   Edit   Find   View   Navigate   Debug   Help

Working Files

testmysql.php
index.php
config.inc.php
database1.php
defaultPreferences.json
db1.php
calc.php
index.html
• insert.php

php project ▾

calc.php
database1.php
db1.php
first.php
index.html
insert.php
second.php
varibles1.php

```php
1   <?php
2   $database="student"; //database name
3   $first=$_POST['first'];//values comes from html file after submitting
4   $last=$_POST['last'];
5   $con = mysqli_connect("localhost:3308","root" ,"",$database);//for wamp 3rd feild
    balnk
6   if (!$con)
7   {
8   die('Could not connect: ' . mysqli_error());
9   }
10  $query = "INSERT INTO info (first,last)VALUES ('$first','$last')";
11  mysqli_query($con,$query);
12  echo "you are Succesflly registered";
13  mysqli_close($con);
14  ?>
```
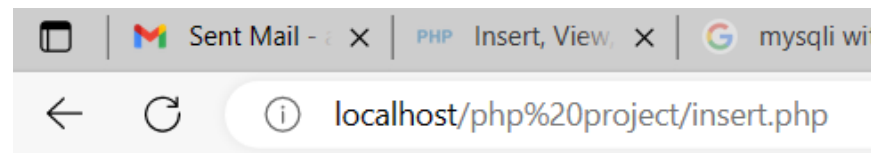
M Sent Mail - ✕   PHP Insert, View ✕   G mysqli wi

←   C   ⓘ   localhost/php%20project/insert.php

you are Succesflly registered

phpMyAdmin

Current server:

MySQL ⌄

Recent Favorites

— New
+ information_schema
+ mysql
+ performance_schema
+ phpdatabase
— student
  — New
  + info
+ sys
+ wp_project

Server: MySQL:3308 » Database: student » Table: info

Browse | Structure | SQL | Search | Insert | Export | Import

⚠ Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete featu...

✓ Showing rows 0 - 2 (3 total, Query took 0.0063 seconds.)

SELECT * FROM `info`

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 ⌄ | Filter rows: Search this table

Extra options

first	last
a	b
a	b
chaitanya	Konda

Connection to MySQL Using MySQLi

using MySQLi Object-Oriented method to Open a Connection to MySQL.

```php
<?php
$servername = "localhost";
$username = "username";
$password = "password";
$dbname = "database";
// Create connection
$conn = new mysqli($servername, $username, $password,$dbname);


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

```html
<html>
<head>
<title>insert data in database using mysqli</title>
<link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>


<div id="main">
<h1>Insert data into database using mysqli</h1>
<div id="login">
<h2>Student's Form</h2>
<hr/>
<form action="" method="post">
<label>Student Name :</label>
<input type="text" name="stu_name" id="name" required="required" placeholder="Please Enter Name"/><br /><br
<label>Student Email :</label>
<input type="email" name="stu_email" id="email" required="required" placeholder="john123@gmail.com"/><br/><b
<label>Student City :</label>
<input type="text" name="stu_city" id="city" required="required" placeholder="Please Enter Your City"/><br/>
<input type="submit" value=" Submit " name="submit"/><br />
</form>
```

```php
<?php
if(isset($_POST["submit"])){
$servername = "localhost";
$username = "root";
$password = "";
$dbname = "college";

// Create connection
$conn = new mysqli($servername, $username, $password, $dbname);
// Check connection
if ($conn->connect_error) {
die("Connection failed: " . $conn->connect_error);
}

$sql = "INSERT INTO students (student_name, student_email, student_city)
VALUES ('".$_POST["stu_name"]."','".$_POST["stu_email"]."','".$_POST["stu_city"]."')";

if ($conn->query($sql) === TRUE) {
echo "<script type= 'text/javascript'>alert('New record created successfully');</script>";
} else {
echo "<script type= 'text/javascript'>alert('Error: " . $sql . "<br>" . $conn->error."');</script>";
}

$conn->close();
}
?>
</body>
</html>
```

Insert multiple

```php
$sql = "INSERT INTO MyGuests (firstname, lastname, email)
VALUES ('John', 'Doe', 'john@example.com');";
$sql .= "INSERT INTO MyGuests (firstname, lastname, email)
VALUES ('Mary', 'Moe', 'mary@example.com');";
$sql .= "INSERT INTO MyGuests (firstname, lastname, email)
VALUES ('Julie', 'Dooley', 'julie@example.com')";

if ($conn->multi_query($sql) === TRUE) {
  echo "New records created successfully";
} else {
  echo "Error: " . $sql . "<br>" . $conn->error;
}
```
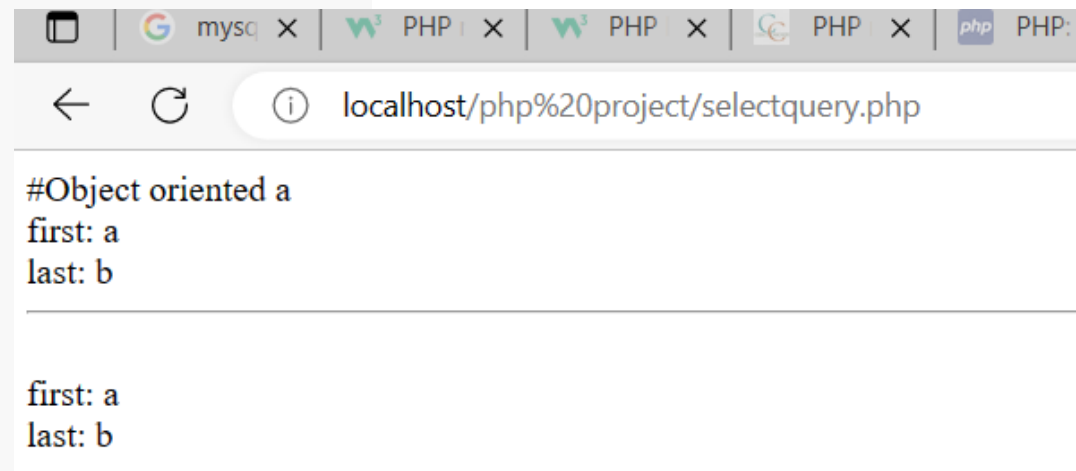
Retrieve records from the mysqli database

```php
#Object oriented
<html>
<body>
<?php
   $conn = new mysqli("localhost:3308", "root", "", "student");
      if(!$conn -> connect_errno)
   {
      $sql = "SELECT * FROM info";
      if($result = $conn -> query($sql))
      {
         while($row = $result -> fetch_row())
         {
            echo "<BR>";
            echo "first: ", $row[0];
            echo "<BR>";
            echo "last: ", $row[1];
            echo "<HR>";
         }
         $result -> free_result();
      }
   }
   $conn -> close();
?>
</body>
</html>
```

```html
<html>
<body>
<?php
    $conn = new mysqli("localhost:3308", "root", "", "student");
        if(!$conn -> connect_errno)
    {

        $f=$_POST['first'];
        $sql = "SELECT * FROM info WHERE first='$f'";
        if($result = $conn -> query($sql))
        {
            while($row = $result -> fetch_row())
            {
                echo "<BR>";
                echo "first: ", $row[0];
                echo "<BR>";
                echo "last: ", $row[1];
                echo "<HR>";
            }
            $result -> free_result();
        }
    }
    $conn -> close();
?>
    </body>
</html>
```

localhost/php%20project/selectquery.php

#Object oriented a
first: a
last: b

first: a
last: b

phpMyAdmin

Current server:

MySQL

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  - info
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- wp_project

Server: MySQL:3308 » **Database: student**

Structure | **SQL** | **Search** | **Query** | **Export** | **Import** | **Operations** | **Privileges** | **Routines** | **Events**

Table name: details   Add 1   column(s) Go

Structure

Name	Type	Length/Values	Default	Collation	Attributes
id	INT	10	None		
fname	VARCHAR	20	None		
lname	VARCHAR	20	None		
mailid	VARCHAR	30	None		

Table comments: **Collation:**   **Storage Engine:**

MyISAM

PARTITION definition:

Partition by: (Expression or column list)

Update query

```php
<?php
// Create connection
$conn = new mysqli("localhost:3308", "root", "", "student");
// Check connection
if ($conn->connect_error) {
  die("Connection failed: " . $conn->connect_error);
}
$query = "INSERT INTO details (id,fname,lname,mailid) VALUES (1,'konda','chaitanya','anu.konda.chaitanya@gmail.com')";
mysqli_query($conn,$query);
$query = "INSERT INTO details (id,fname,lname,mailid) VALUES (2,'aaa','bbb','anu.konda.chaitanya1@gmail.com')";
mysqli_query($conn,$query);
$sql = "UPDATE details SET lname='ZZZZ' WHERE id=2";
if ($conn->query($sql) === TRUE) {
  echo "Record updated successfully";
} else {
  echo "Error updating record: " . $conn->error;
}
$conn->close();
?>
```

New
information_schema
mysql
performance_schema
phpdatabase
student
New
details
info
sys
wp_project

☐ Show all | Number of rows: 25 ⌄ Filter rows: Search this table Sort by key: N

Extra options

←T→	▽	id	fname	lname	mailid
☐ ✏ Edit ⌗ Copy ⊖ Delete		1	konda	chaitanya	anu.konda.chaitanya@gmail.com
☐ ✏ Edit ⌗ Copy ⊖ Delete		2	aaa	ZZZZ	anu.konda.chaitanya1@gmail.com

↰ ☐ Check all *With selected:* ✏ Edit ⌗ Copy ⊖ Delete ⊞ Export

☐ Show all | Number of rows: 25 ⌄ Filter rows: Search this table Sort by key: N

Query results operations

🖨 Print   ⌗ Copy to clipboard   ⊞ Export   📊 Display chart   ⊞ Create view

Delete record

```php
1   <?php
2   // Create connection
3   $conn = new mysqli("localhost:3308", "root", "", "student");
4   // Check connection
5   if ($conn->connect_error) {
6     die("Connection failed: " . $conn->connect_error);
7   }
8   $sql = "DELETE FROM details WHERE id=2";
9   if ($conn->query($sql) === TRUE) {
10    echo "Record deleted successfully";
11  } else {
12    echo "Error deleting record: " . $conn->error;
13  }
14  $conn->close();
15  ?>
```

```
#mysqli procedural
<?php
// Create connection
$conn = mysqli_connect("localhost:3308", "root", "", "student");
// Check connection
if (!$conn) {
  die("Connection failed: " . mysqli_connect_error());
}

// sql to delete a record
$sql = "DELETE FROM details WHERE id=2";

if (mysqli_query($conn, $sql)) {
  echo "Record deleted successfully";
} else {
  echo "Error deleting record: " . mysqli_error($conn);
}

mysqli_close($conn);
?>
```

phpMyAdmin

Server: MySQL:3308 » Database: student » Table: details

Browse | Structure | SQL | Search | Insert | Export | Import

Current server:

MySQL

Recent | Favorites

✓ Showing rows 0 - 0 (1 total, Query took 0.0005 seconds.)

```sql
SELECT * FROM `details`
```

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 ⌄ | Filter rows: Search this table

Extra options

←T→				▽ id	fname	lname	mailid
☐	✏ Edit	⋮ Copy	⊖ Delete	1	konda	chaitanya	anu.konda.chaitanya@gmail.com

↑ ☐ Check all With selected: ✏ Edit ⋮ Copy ⊖ Delete ⬛ Export

☐ Show all | Number of rows: 25 ⌄ | Filter rows: Search this table

- New
- ⊞ information_schema
- ⊞ mysql
- ⊞ performance_schema
- ⊞ phpdatabase
- ⊟ student
  - New
  - ⊞ details
  - ⊞ info
- ⊞ sys
- ⊞ wp_project