

Internet Engineering

PHP - 2

مهندسی اینترنت

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Content

- Create Function
- Include Document
- Local and Global Scope
- Super Global
- Create Database
- Connect to DB through PHP
- Prepared Statement

The background features a light grey diagonal band running from the top-left towards the bottom-right. A thin, dark blue line runs parallel to the bottom-left edge of this band. A thin, yellow line runs parallel to the bottom-right edge of the grey band.

Create Function

Create Function

```
function functionName()  
{  
    statements;  
}
```

Use it multiple times in many different places on your code.

Use it over and over again.

```
<?php  
  
/* Defining a PHP Function */  
  
function writeMessage() {  
    echo "Have a nice time!";  
}  
  
/* Calling a PHP Function */  
  
writeMessage();  
  
?>
```

```
1  <html>
2  <head>
3  <meta charset="UTF-8">
4  <title>Function</title>
5  </head>
6
7  <body>
8
9  <?php
10
11
12
13     function newCalc($x)
14     {
15         $newno = $x * 0.75;
16         echo "75% of ".$x." is: ".$newno."<p>";
17     }
18
19     $x = 100;
20     newCalc($x);
21
22     $a = 30;
23     newCalc($a);
24 ?>
25
26
27 </body>
28 </html>
29
```

75% of 100 is: 75

75% of 30 is: 22.5

The background features a light grey diagonal band running from the top-left towards the bottom-right. A thin dark blue line runs parallel to the bottom-left edge, and a thin yellow line runs parallel to the bottom-right edge.

Include Document

Bar

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <meta charset="utf-8">
5   <title>Header of Website Page</title>
6   <link rel="stylesheet" type="text/css" href="style.css">
7 <style>
8 body {
9   margin: 0;
10 }
11
12 ul {
13   list-style-type: none;
14   margin: 0;
15   padding: 0;
16   width: 15%;
17   background-color: #F5F5DC;
18   position: fixed;
19   height: 100%;
20   overflow: auto;
21 }
22
23 li a {
24   display: block;
25   color: #000;
26   padding: 8px 16px;
27   text-decoration: none;
28   font-size: 30px;
29 }
30
31 li a.active {
32   background-color: #7FFFD4;
33   color: white;
34 }
35
36 li a:hover:not(.active) {
37   background-color: #555;
38   color: white;
39 }
40 </style>
```

```
42 <body>
43
44 <ul>
45   <li><a class="active" href="#home">Home</a></li>
46   <li><a href="#news">News</a></li>
47   <li><a href="#contact">Contact</a></li>
48   <li><a href="#about">About</a></li>
49 </ul>
50 <div style="margin-left:25%;padding:1px 16px;height:1000px;">
51   <h1>Welcome to our University</h1>
52 </div>
53 </body>
54 </html>
55
```

Home

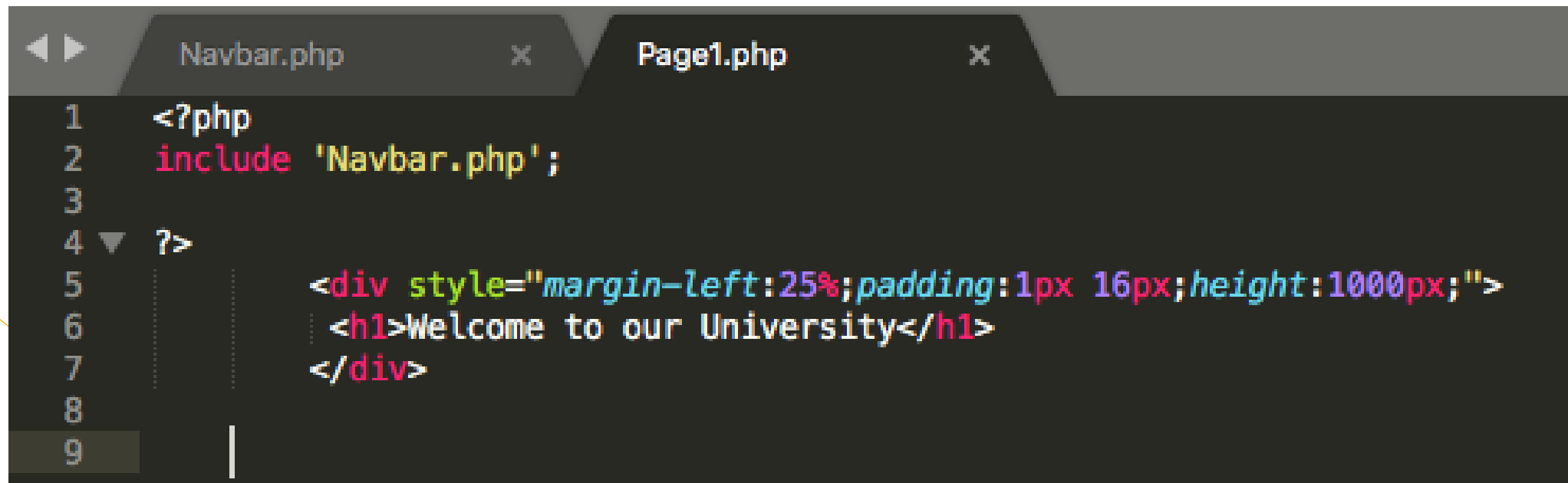
News

Contact

About

Welcome to our University

include



```
1  <?php
2  include 'Navbar.php';
3
4  ?>
5      <div style="margin-left:25%;padding:1px 16px;height:1000px;">
6          <h1>Welcome to our University</h1>
7      </div>
8
9  |
```



```
Navbar.php Page1.php Showresult.php x
1 <?php
2
3 function Showresult(){
4     echo "This is Showresult function.<p>"
5 }
```

| | | | |
|----------------|----------------------|-----------|--------|
| Calculator.php | Today at 11:23 AM | 2 KB | PHP |
| fCalc.php | Today at 1:43 AM | 338 bytes | PHP |
| Function | Today at 11:26 AM | -- | Folder |
| index.php | Yesterday at 9:53 AM | 170 bytes | PHP |
| Navbar.php | Today at 10:49 AM | 804 bytes | PHP |
| Page1.php | Today at 10:47 AM | 149 bytes | PHP |

```
Navbar.php x Page1.php Showresult.php x
1 <?php
2     include 'Function/Showresult.php';
3 ?>
4
5 <!DOCTYPE html>
6 <html>
7 <head>
8     <meta charset="utf-8">
9     <title>Header of Website Page</title>
10    <link rel="stylesheet" type="text/css" href="style.css">
11 <style>
```

Local and Global Scope

```
1  <html>
2  <head>
3  <meta charset="UTF-8">
4  <title>Local and Global Scope</title>
5  </head>
6
7  <body>
8
9  <?php
10     $x = 5; //Global scope
11     function number(){
12         $y = 10; //local scope
13     }
14     echo $x."<p>";
15
16     echo $y;
17 ?>
18
19 </body>
20 </html>
```

5

Notice: Undefined variable: y in /Applications/XAMPP/xamppfiles/htdocs/test/Scope.php on line 16

The background features a light grey diagonal band running from the top-left towards the bottom-right. A thin dark blue line runs parallel to the bottom-left edge, and a thin yellow line runs parallel to the bottom-right edge.

Super Global

Super Global

- \$GLOBALS
- \$_POST
- \$_GET
- \$_COOKIE
- \$_SESSION

\$GLOBALS

Use \$GLOBALS in spatial cases.

```
1  <html>
2  <head>
3  <meta charset="UTF-8">
4  <title>Local and Global Scope</title>
5  </head>
6
7  <body>
8
9  <?php
10     $x = 5;
11     function number($x){
12         $y = 10;
13     }
14     |
15  ?>
16
17 </body>
18 </html>
```

```
1  <html>
2  <head>
3  <meta charset="UTF-8">
4  <title>Local and Global Scope</title>
5  </head>
6
7  <body>
8
9  <?php
10     $x = 5;
11     function number(){
12         $y = 10;
13         $GLOBALS['x'];
14     }
15
16     number();
17  ?>
18
19 </body>
20 </html>
```

Difference!

```
1  <html>
2  <head>
3  <meta charset="UTF-8">
4  <title>Local and Global Scope</title>
5  </head>
6
7  <body>
8
9  <?php
10     $x = 5;
11     function number($x){
12         $y = 10;
13         echo "The Global x is:". $GLOBALS['x']."<p>";
14         echo "In this function x is: ".$x;
15     }
16     $z=17;
17     number($z);
18 ?>
19
20 </body>
21 </html>
```

The Global x is:5

In this function x is: 17

POST and GET

GET

```
<html>
<head>
<body>

<form action="script.php" method="get">
  User: <input type="text" name="user" /><br />
  <input type="radio" name="gen" value="Man" />Man
  <input type="radio" name="gen" value="Woman" />Woman<br />
  <input type="submit" value="Send" />
</form>

</body>
</html>
```

```
<?php

echo $_GET['user'];
echo "<p>";

if (isset($_GET['user']) && isset($_GET['gen'])) {

  $user = $_GET['user'];
  $gen = $_GET['gen'];

  echo 'User: '. $user. ' - Gender: '. $gen;
}
?>
```

localhost/test/Global.php

User:

☐ Man ☐ Woman

localhost/test/script.php?user=Maria&gen=woman

Maria

User: Maria - Gender: woman

POST

```
<html>
<head>
<body>

<form action="script.php" method="post">
  User: <input type="text" name="user" /><br />
  <input type="radio" name="gen" value="Man" />Man
  <input type="radio" name="gen" value="Woman" />Woman<br />
  <input type="submit" value="Send" />
</form>

</body>
</html>
```


```
<?php

echo $_POST['user'];
    echo "<p>";

if (isset($_POST['user']) && isset($_POST['gen'])) {

    $user = $_POST['user'];
    $gen = $_POST['gen'];

    echo 'User: '. $user. ' - Gender: '. $gen;
}
?>
```

 localhost/test/script.php

Ali

User: Ali - Gender: Man

The background features a light grey diagonal band running from the top-left towards the bottom-right. A thin dark blue line runs parallel to the bottom-left edge, and a thin yellow line runs parallel to the bottom-right edge.

Cookies and Sessions

Cookies and Session

- **Cookies:** a way for a server to store information on the user's computer.(Hacker can access your information)

- Has time limit (is settable).

setcookie(name, value, expire, path, domain, secure)

- **Sessions:** save the information in the server side.
(remember who you are when you log in the website and brows other webpages – login, password)

- Session closed when you close your browser.

session_start();

\$_SESSION['name'] = Value;

```
<?php
setcookie("name","Me",time()+3);

$_SESSION['name'] = "12";

?>
```

```

<!DOCTYPE html>
<!DOCTYPE html>
<html>
<head>
    <title>My Website</title>
    <link rel="stylesheet" type="text/css" href="style.css">

</head>
<body>
    <ul>
        <li><a href="home.php">HOME</a> </li>
        <li><a href="contact.php">CONTACT</a></li>
    </ul>

    <?php
$_SESSION['username'] = "k12345";
echo $_SESSION['username'];
?>

</body>
</html>

```

```

<!DOCTYPE html>
<!DOCTYPE html>
<html>
<head>
    <title>Home page</title>
</head>
<body>
    <ul>
        <li><a href="home.php">HOME</a> </li>
        <li><a href="contact.php">CONTACT</a></li>
    </ul>

    |
    <?php
echo "<h1> WELCOME TO THE HOME PAGE </h1>";

?>

</body>
</html>

```

```

<!DOCTYPE html>
<!DOCTYPE html>
<html>
<head>
    <title>Contact page</title>
</head>
<body>
    <ul>
        <li><a href="home.php">HOME</a> </li>
        <li><a href="contact.php">CONTACT</a></li>
    </ul>

    <?php
echo "<h1> Please contact me: example@mail.com </h1>";

?>

</body>
</html>

```

- [HOME](#)
- [CONTACT](#)

k12345

- [HOME](#)
- [CONTACT](#)

WELCOME TO THE HOME PAGE

- [HOME](#)
- [CONTACT](#)

Please contact me: example@mail.com

```
<!DOCTYPE html>
<!DOCTYPE html>
<html>
<head>
  <title>Contact page</title>
</head>
<body>
  <ul>
    <li><a href="home.php">HOME</a> </li>
    <li><a href="contact.php">CONTACT</a></li>
  </ul>

  <?php
echo "<h1> Please contact me: example@mail.com </h1>";
echo $_SESSION['username'];

?>

</body>
</html>
```

- [HOME](#)
- [CONTACT](#)

Please contact me: example@mail.com

Notice: Undefined variable: _SESSION in /Applications/XAMPP/xamppfiles/htdocs/test/contact.php on line 16

```

<?php
session_start();
?>

<!DOCTYPE html>
<!DOCTYPE html>
<html>
<head>
    <title>My Website</title>
    <link rel="stylesheet" type="text/css" href="style.css">

</head>
<body>
    <ul>
        <li><a href="home.php">HOME</a> </li>
        <li><a href="contact.php">CONTACT</a></li>
    </ul>

    <?php

$_SESSION['username'] = "k12345";
echo $_SESSION['username'];
?>

</body>
</html>

```

```

<?php
session_start();
?>

<!DOCTYPE html>
<!DOCTYPE html>
<html>
<head>
    <title>My Website</title>
    <link rel="stylesheet" type="text/css" href="style.css">

</head>
<body>
    <ul>
        <li><a href="home.php">HOME</a> </li>
        <li><a href="contact.php">CONTACT</a></li>
    </ul>

    <?php

$_SESSION['username'] = "k12345";
echo $_SESSION['username'];
?>

</body>
</html>

```

- [HOME](#)
- [CONTACT](#)

Please contact me: example@mail.com

k12345

Check the Log in

- [HOME](#)
- [CONTACT](#)

k12345

You are Logged in ;)

```
<?php
session_start();
?>

<!DOCTYPE html>
<!DOCTYPE html>
<html>
<head>
    <title>My Website</title>
    <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
    <ul>
        <li><a href="home.php">HOME</a> </li>
        <li><a href="contact.php">CONTACT</a></li>
    </ul>

    <?php

    $_SESSION['username'] = "k12345";
    echo $_SESSION['username'];

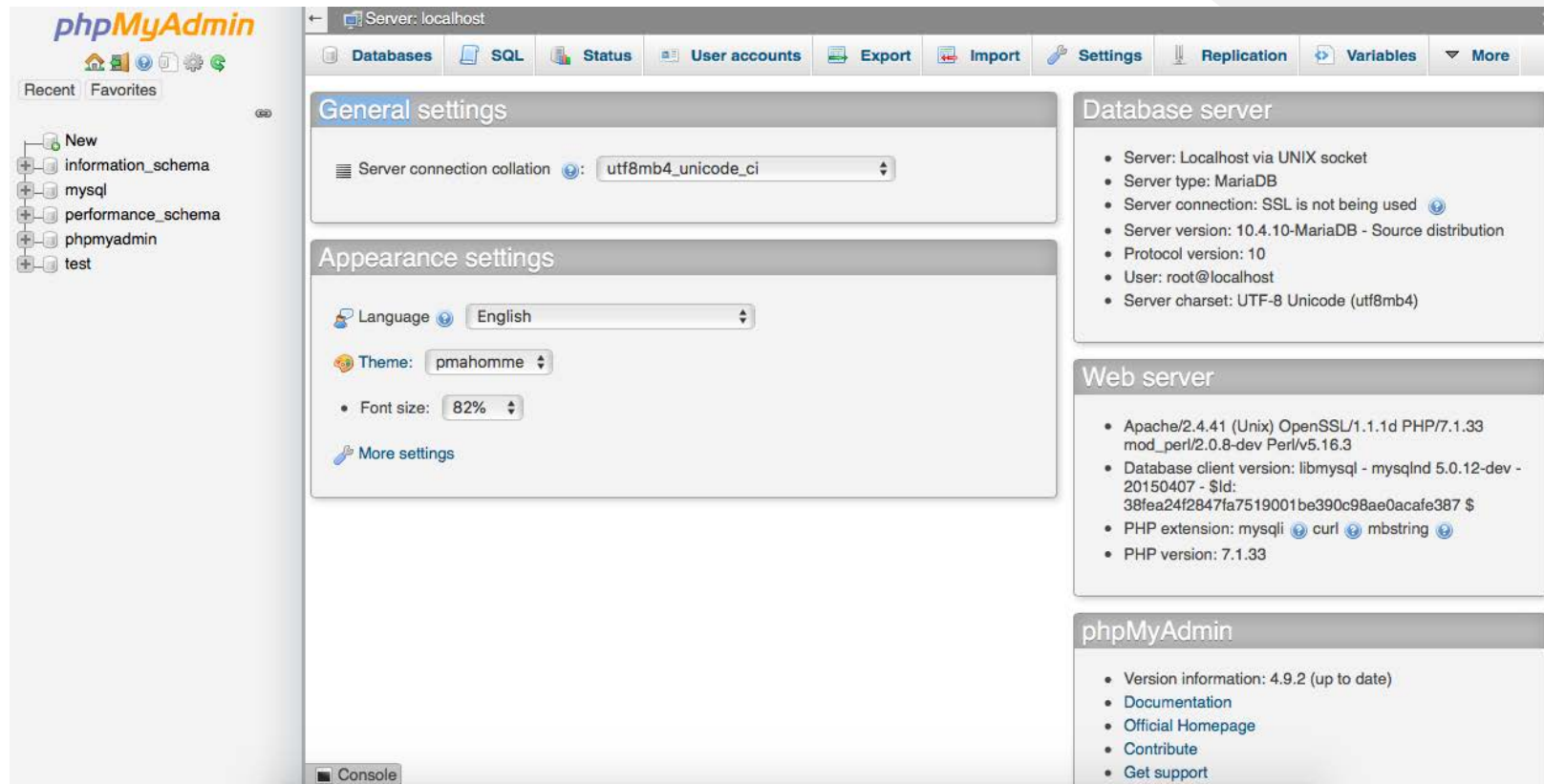
    if (!isset($_SESSION['username'])) {
        echo "<p>You are not Logged in!";
    }
    else {
        echo "<p>You are Logged in ;)";
    }

?>
</body>
</html>
```

Create Database

Create Database in XAMPP

- Run xampp servers
- Go to browser -> localhost/phpMyAdmin
- Databases Tab
- Do not use Big letters or -



Create Table

- It is possible to have **many Tables** inside a **single Database**.
- Each data must have a **primary ID**.
- Click on SQL tab -> write SQL code to create table



 Structure  SQL  Search  Query  Export  Import  Operations  Privileges  Routines  More

Show query box

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.2495 seconds.)

```
CREATE TABLE posts ( id int(10) not null PRIMARY KEY AUTO_INCREMENT, subject varchar(128) NOT null, content varchar(1000) NOT null, date datetime NOT null )
```

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

Recent Favorites

- New
- information_schema
- lessons
 - New
 - posts
- mysql
- performance_schema
- phpmyadmin
- test

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0019 seconds.)

```
SELECT * FROM `posts`
```

☐ Profiling [\[Edit inline\]](#) [\[Edit\]](#) [\[Explain SQL\]](#) [\[Create PHP code\]](#) [\[Refresh\]](#)

| id | subject | content | date |
|----|---------|---------|------|
|----|---------|---------|------|

Query results operations

[Create view](#)

[Browse](#)
[Structure](#)
[SQL](#)
[Search](#)
[Insert](#)
[Export](#)
[Import](#)
[Privileges](#)
[Operations](#)
[More](#)

[Table structure](#)
[Relation view](#)

| # | Name | Type | Collation | Attributes | Null | Default | Comments | Extra | Action |
|----------------------------|----------------|---------------|--------------------|------------|------|---------|----------|----------------|--------------------|
| <input type="checkbox"/> 1 | id | int(10) | | | No | None | | AUTO_INCREMENT | Change Drop More |
| <input type="checkbox"/> 2 | subject | varchar(128) | utf8mb4_general_ci | | No | None | | | Change Drop More |
| <input type="checkbox"/> 3 | content | varchar(1000) | utf8mb4_general_ci | | No | None | | | Change Drop More |
| <input type="checkbox"/> 4 | date | datetime | | | No | None | | | Change Drop More |

☐ Check all
 With selected:
 [Browse](#)
 Change
 Drop
 Primary
 Unique
 Index
 Fulltext
 Add to central columns

Remove from central columns

Add Data to Database

- Choose Table in Database -> SQL
- *INSERT INTO posts(subject, content, date) VALUES (';', ';', '')*

```
INSERT INTO posts(subject, content, date) VALUES ('Computer Network', 'A computer network is a digital telecommunications network which allows nodes to share resources. In computer networks, computing devices exchange data with each other using connections (data links) between nodes. These data links are established over cable media such as twisted pair or fiber-optic cables, and wireless media such as Wi-Fi.', '2019-12-01 18:30')
```

[\[Edit inline\]](#) [\[Edit\]](#) [\[Create PHP code\]](#)

✓ Showing rows 0 - 0 (1 total, Query took 0.0022 seconds.)

```
SELECT * FROM `posts`
```

☐ Profiling [\[Edit inline\]](#) [\[Edit\]](#) [\[Explain SQL\]](#) [\[Create PHP code\]](#) [\[Refresh\]](#)

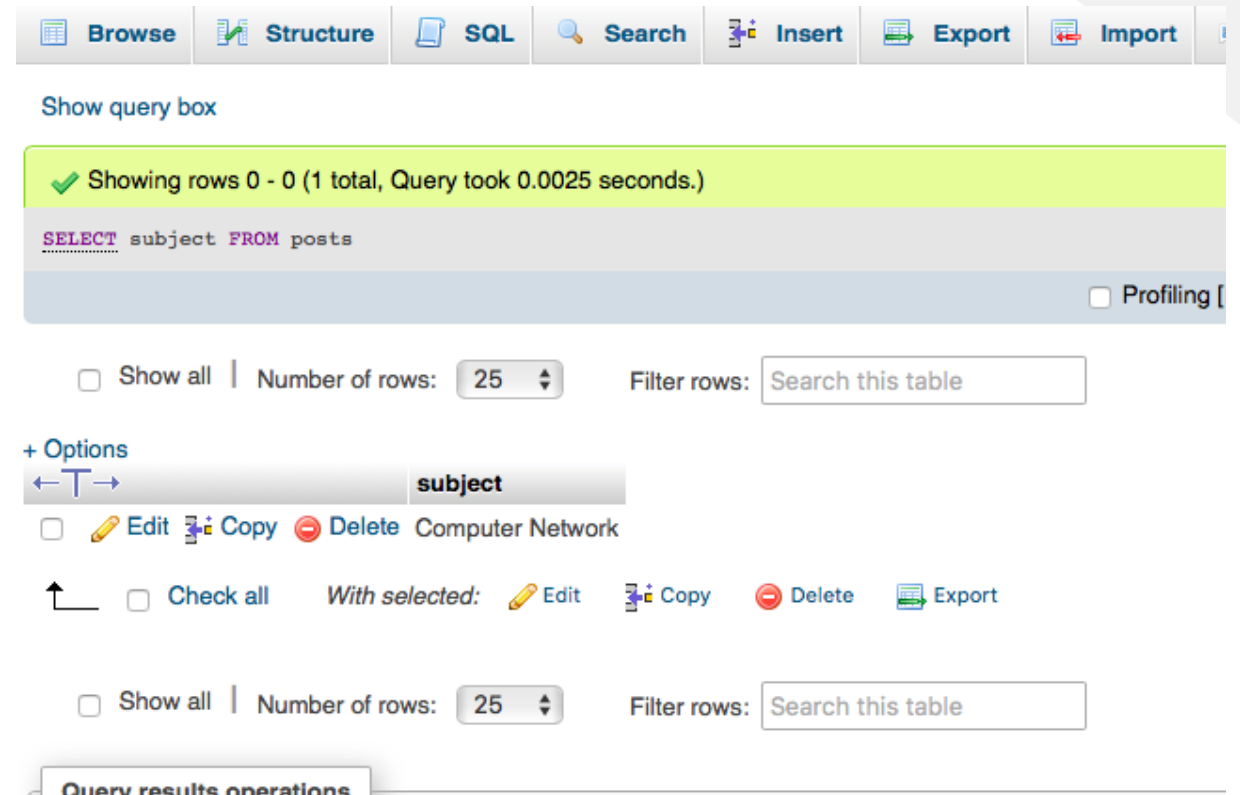
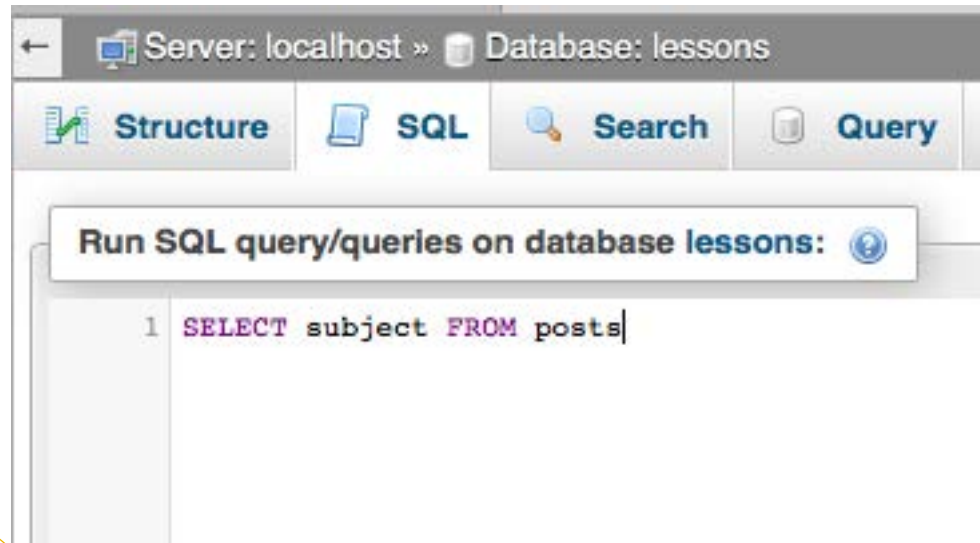
☐ Show all | Number of rows: Filter rows:

+ Options

| | id | subject | content | date |
|---|----|------------------|---|---------------------|
| <input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete | 1 | Computer Network | A computer network is a digital telecommunications... | 2019-12-01 18:30:00 |

☐ Check all With selected: ☐ Edit ☐ Copy ☐ Delete ☐ Export

Select Data from Database



Browse
 Structure
 SQL
 Search

Run SQL query/queries on table lessons.posts: ?

```
1 SELECT * FROM `posts` WHERE id='2'
```

Show query box

✓ Showing rows 0 - 0 (1 total, Query took 0.0277 seconds.)

```
SELECT * FROM `posts` WHERE id='2'
```

☐ Profiling [\[Edit inline\]](#) [\[Edit \]](#) [\[Explain \]](#)

☐ Show all | Number of rows: 25 Filter rows:

+ Options







| | | id | subject | content | date |
|--------------------------|------------------------------------|--|---------|---------|--|
| <input type="checkbox"/> | Edit | Copy | Delete | 2 | Wireless Network Wireless networking is a method by which homes, te... 2019-12-03 09:23:00 |
| | <input type="checkbox"/> Check all | With selected: Edit Copy Delete Export | | | |

Update Database

```
1 UPDATE posts
2 SET subject = 'wireless Sensor Network'
3 WHERE id = '2'
```

✓ 1 row affected. (Query took 0.0265 seconds.)

```
UPDATE posts SET subject = 'wireless Sensor Network' WHERE id = '2'
```

| | | | | | | | |
|--------------------------|--|--|--|---|-------------------------|---|---------------------|
| <input type="checkbox"/> |  Edit |  Copy |  Delete | 1 | Computer Network | A computer network is a digital telecommunications... | 2019-12-01 18:30:00 |
| <input type="checkbox"/> |  Edit |  Copy |  Delete | 2 | wireless Sensor Network | Wireless networking is a method by which homes, te... | 2019-12-03 09:23:00 |

Delete Data

```
1 DELETE FROM posts
2 WHERE id = '2'
```

Do you really want to execute "DELETE FROM posts WHERE id = '2'"?

Cancel OK

✓ 1 row affected. (Query took 0.0410 seconds.)

DELETE FROM posts WHERE id = '2'

+ Options

| | id | subject | content | date |
|---|----|------------------|---|---------------------|
| <input type="checkbox"/> Edit Copy Delete | 1 | Computer Network | A computer network is a digital telecommunications... | 2019-12-01 18:30:00 |

☐ Check all With selected: Edit Copy Delete Export

Order Data

```
1 SELECT * FROM posts ORDER BY id ASC
```

+ Options

| | | id | subject | content | date |
|--------------------------|--|----|------------------|---|---------------------|
| <input type="checkbox"/> |  Edit  Copy  Delete | 1 | Computer Network | A computer network is a digital telecommunications... | 2019-12-01 18:30:00 |
| <input type="checkbox"/> |  Edit  Copy  Delete | 3 | Microwave | Microwaves are a form of electromagnetic radiation... | 2019-12-06 08:20:00 |

```
1 SELECT * FROM posts ORDER BY id DESC
```

+ Options

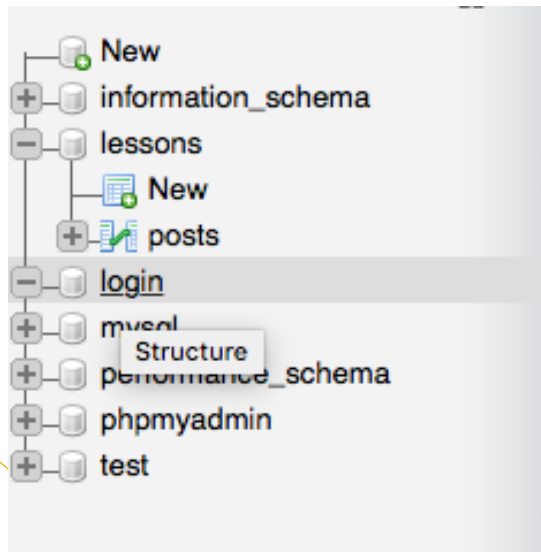
| | | id | subject | content | date |
|--------------------------|--|----|------------------|---|---------------------|
| <input type="checkbox"/> |  Edit  Copy  Delete | 3 | Microwave | Microwaves are a form of electromagnetic radiation... | 2019-12-06 08:20:00 |
| <input type="checkbox"/> |  Edit  Copy  Delete | 1 | Computer Network | A computer network is a digital telecommunications... | 2019-12-01 18:30:00 |

```
1 SELECT * FROM posts ORDER BY subject ASC
```

Connect to DB through PHP

Database

1. Create Database (login)



2. Create Table (users)

```
1 CREATE TABLE users (  
2     user_id int(10) NOT null PRIMARY KEY AUTO_INCREMENT,  
3     user_first varchar(256) NOT null,  
4     user_last varchar(256) NOT null,  
5     user_email varchar(256) NOT null,  
6     user_uid varchar(256) NOT null,  
7     user_pwd varchar(256) NOT null  
8 );|
```

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0283 seconds.)

```
SELECT * FROM `users`
```

| user_id | user_first | user_last | user_email | user_uid | user_pwd |
|---------|------------|-----------|------------|----------|----------|
|---------|------------|-----------|------------|----------|----------|

3. insert data

```
1 INSERT INTO users(user_first, user_last, user_email, user_uid, user_pwd) VALUES ('John','Doe', 'john@mail.com', 'Admin', 'jd123');  
2 INSERT INTO users(user_first, user_last, user_email, user_uid, user_pwd) VALUES ('Juliet','Niowan', 'jul@mail.com', 'juli57', 'jn1234');  
3 INSERT INTO users(user_first, user_last, user_email, user_uid, user_pwd) VALUES ('Jain','Lorien', 'jain1@mail.com', 'jain32', 'jl567');|
```

- New
- information_schema
- lessons
 - New
- posts
- login
 - New
 - users
- mysql
- performance_schema
- phpmyadmin
- test

✓ 1 row inserted.
Inserted row id: 1 (Query took 0.0317 seconds.)

```
INSERT INTO users(user_first, user_last, user_email, user_uid, user_pwd) VALUES ('John','Doe', 'john@mail.com', 'Admin', 'jd123')
```

[\[Edit inline\]](#) [\[Edit\]](#) [\[Create PHP code\]](#)

✓ 1 row inserted.
Inserted row id: 2 (Query took 0.0030 seconds.)

```
INSERT INTO users(user_first, user_last, user_email, user_uid, user_pwd) VALUES ('Juliet','Niowan', 'jul@mail.com', 'juli57', 'jn1234')
```

[\[Edit inline\]](#) [\[Edit\]](#) [\[Create PHP code\]](#)

✓ 1 row inserted.
Inserted row id: 3 (Query took 0.0038 seconds.)

```
INSERT INTO users(user_first, user_last, user_email, user_uid, user_pwd) VALUES ('Jain','Lorien', 'jainl@mail.com', 'jain32', 'jl567')
```

[\[Edit inline\]](#) [\[Edit\]](#) [\[Create PHP code\]](#)

✓ Showing rows 0 - 2 (3 total, Query took 0.0022 seconds.)

```
SELECT * FROM `users`
```

☐ Profiling [\[Edit in\]](#)

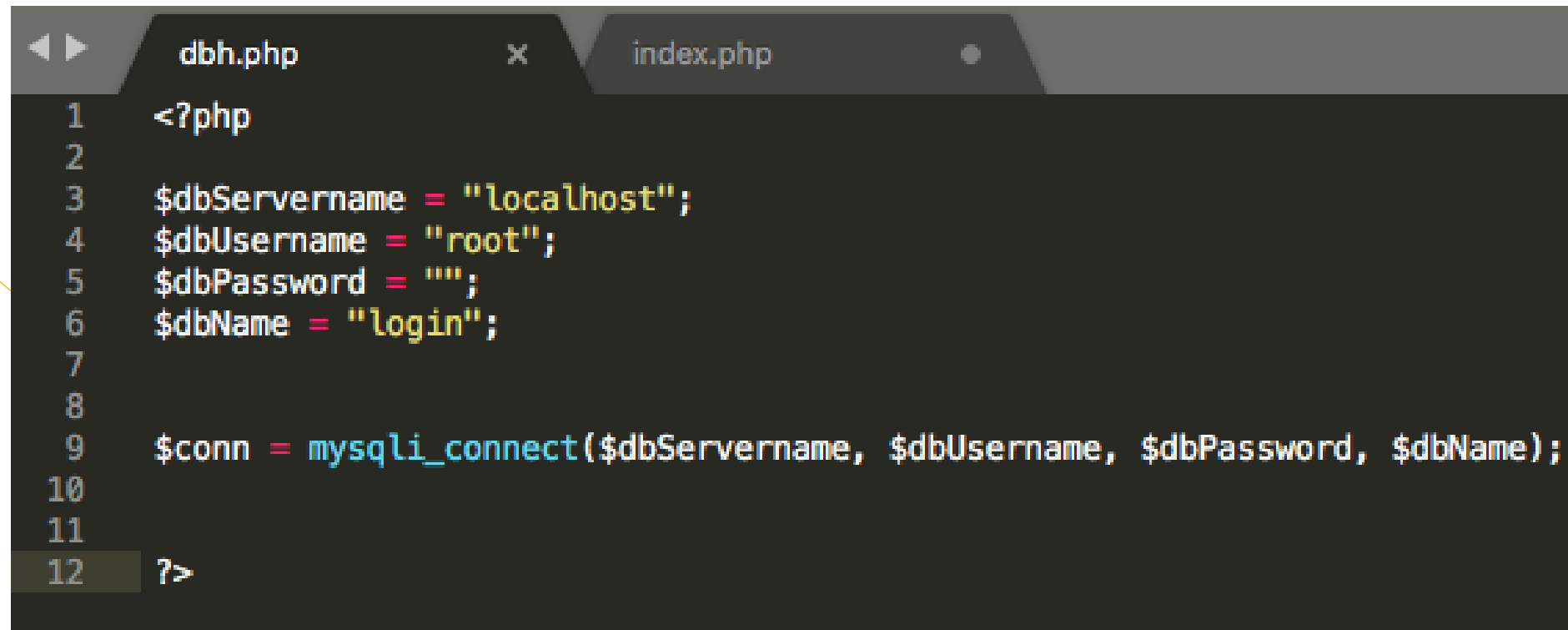
☐ Show all | Number of rows: 25 Filter rows: Sort by key: N

+ Options

| | | user_id | user_first | user_last | user_email | user_uid | user_pwd |
|--------------------------|--------------------|---------|------------|-----------|----------------|----------|----------|
| <input type="checkbox"/> | Edit Copy Delete | 1 | John | Doe | john@mail.com | Admin | jd123 |
| <input type="checkbox"/> | Edit Copy Delete | 2 | Juliet | Niowan | jul@mail.com | juli57 | jn1234 |
| <input type="checkbox"/> | Edit Copy Delete | 3 | Jain | Lorien | jainl@mail.com | jain32 | jl567 |

Access to DB through PHP

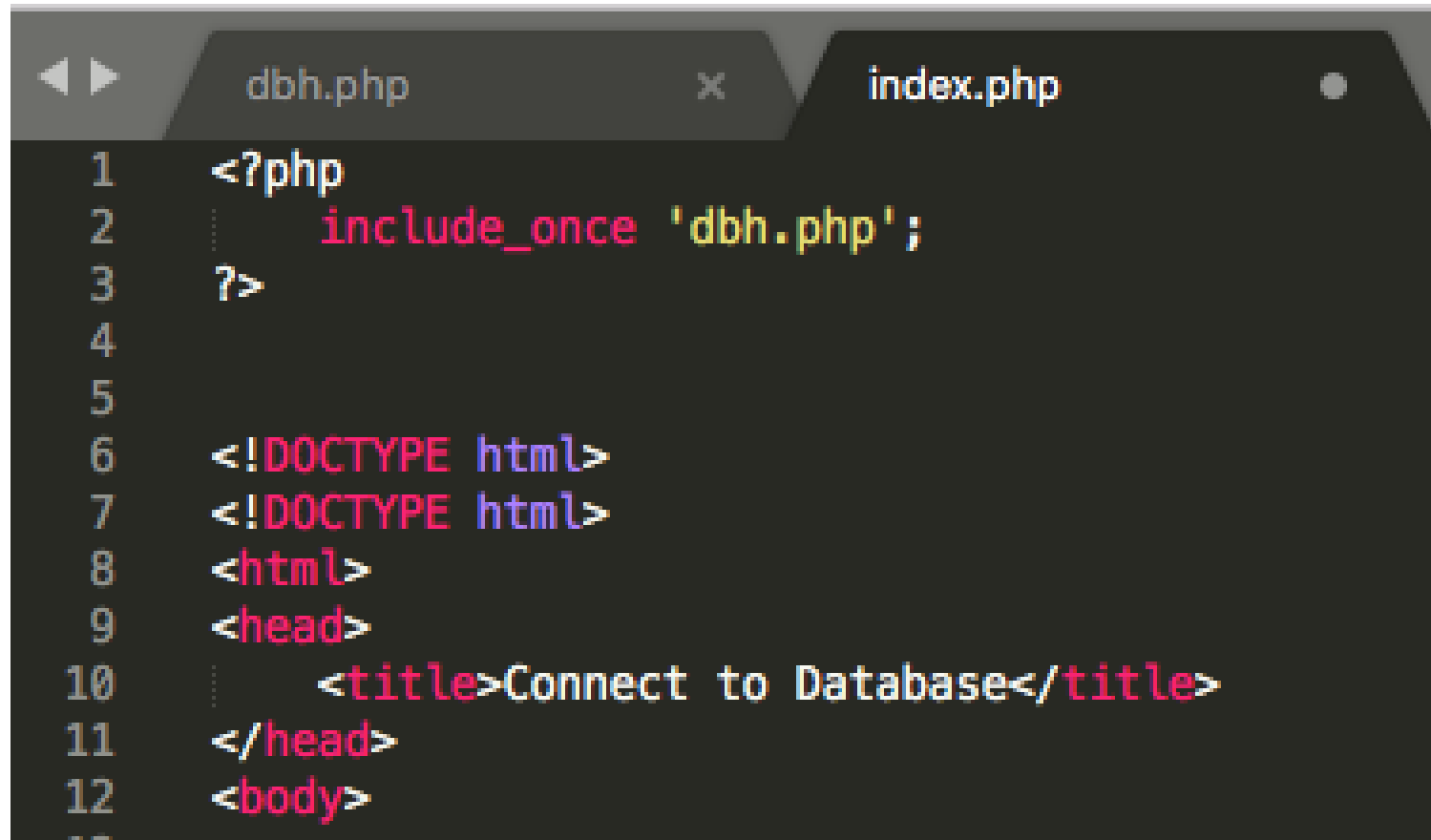
- Create 1 folder in htdocs (include)
 - Create 2 files inside include (one for handling DB in PHP code (dbh), and Second, for access to DB (index))

A screenshot of a code editor with a dark background. The editor has two tabs at the top: 'dbh.php' and 'index.php'. The 'dbh.php' tab is active, showing PHP code. The code is as follows:

```
1 <?php
2
3 $dbServername = "localhost";
4 $dbUsername = "root";
5 $dbPassword = "";
6 $dbName = "login";
7
8
9 $conn = mysqli_connect($dbServername, $dbUsername, $dbPassword, $dbName);
10
11
12 ?>
```


Connect index to DB

- include_once 'name of access DB file'



```
1  <?php
2      include_once 'dbh.php';
3  ?>
4
5
6  <!DOCTYPE html>
7  <!DOCTYPE html>
8  <html>
9  <head>
10     <title>Connect to Database</title>
11 </head>
12 <body>
```

Query to DB

John
Juliet
Jain

```
dbh.php x index.php
1  <?php
2      include_once 'dbh.php';
3  ?>
4
5
6  <!DOCTYPE html>
7  <!DOCTYPE html>
8  <html>
9  <head>
10     <title>Connect to Database</title>
11 </head>
12 <body>
13
14 <?php
15
16     $sql = "SELECT * FROM users;"; //Select the Actual Data - (SELECT * FROM users WHERE user_last = 'Doa');
17     $result = mysqli_query($conn, $sql); //Query Data
18     $resultCheck = mysqli_num_rows($result); //optional- in case there is no result to display
19
20     if($resultCheck > 0){
21         while ($row = mysqli_fetch_assoc($result)) //$row in this case is an Array
22         {
23             echo $row['user_first']."<br>"; //$row fetch Name of the columns
24         }
25     }
26
27 ?>
28
29 </body>
30 </html>
```

Insert Data to DB

Data inserted.

```
1  <?php
2      include 'dbh.php';
3  ?>
4
5
6  <!DOCTYPE html>
7  <!DOCTYPE html>
8  <html>
9  <head>
10     <title>Connect to Database</title>
11 </head>
12 <body>
13
14 <?php
15
16     $sql = "INSERT INTO users (user_first, user_last, user_email, user_uid,
17         user_pwd) VALUES('Hena', 'Winload', 'henaw@mail.com', 'hw123', 'hena890')";
18     $result = mysqli_query($conn, $sql);
19
20     if($result){
21         echo "Data inserted.";
22     }
23
24 ?>
25 </body>
26 </html>
```

+ Options

| | | user_id | user_first | user_last | user_email | user_uid | user_pwd |
|--------------------------|--------------------|---------|------------|-----------|----------------|----------|----------|
| <input type="checkbox"/> | Edit Copy Delete | 1 | John | Doe | john@mail.com | Admin | jd123 |
| <input type="checkbox"/> | Edit Copy Delete | 2 | Juliet | Niowan | jul@mail.com | juli57 | jn1234 |
| <input type="checkbox"/> | Edit Copy Delete | 3 | Jain | Lorien | jainl@mail.com | jain32 | jl567 |
| <input type="checkbox"/> | Edit Copy Delete | 4 | Hena | Winload | henaw@mail.com | hw123 | hena890 |

Insert to DB with Users Input

1. Create form in file index

```
<!DOCTYPE html>
<html>
<head>
  <title>Connect to Database</title>
</head>
<body>

  <form action="submit.php" method="POST">
    <input type="text" name="first" placeholder="Firstname">
    <br>
    <input type="text" name="last" placeholder="Lastname">
    <br>
    <input type="text" name="email" placeholder="E-mail">
    <br>
    <input type="text" name="uid" placeholder="Username">
    <br>
    <input type="password" name="pwd" placeholder="Password">
    <br>
    <button type="submit" name="submit"> SUBMIT </button>
  </form>

</body>
</html>
```

Insert to DB with Users Input ...

2. Cut php codes from index and paste in new file (submit)

Create new variables to get data from form (with \$_POST)

When submission is success back to form page (header ("location ..."))

Add (include 'dbh.php') to access to DB

A screenshot of a code editor with four tabs: dbh.php, index.php, submit.php, and table.sql. The submit.php tab is active, showing PHP code for inserting user data into a database. The code includes a database connection, variable assignment for form data, an SQL INSERT statement, and a header redirecting to index.php upon success.

```
<?php
include 'dbh.php';

//create variables
$first = $_POST['first'];
$last = $_POST['last'];
$email = $_POST['email'];
$uid = $_POST['uid'];
$pwd = $_POST['pwd'];

$sql = "INSERT INTO users (user_first, user_last, user_email, user_uid, user_pwd) VALUES('$first', '$last', '$email', '$uid', '$pwd');"
mysqli_query($conn, $sql);

header("location: index.php?submit=success"); //after submission back to first page

?>
```

Insert to DB with Users Input ...

3. Run the index file

Add new users

Firstname

Lastname

E-mail

Username

Password

SUBMIT

Michel

Lastname

E-mail

Username

Password

SUBMIT

+ Options

| | | user_id | user_first | user_last | user_email | user_uid | user_pwd |
|--------------------------|--------------------|---------|------------|-----------|----------------|----------|----------|
| <input type="checkbox"/> | Edit Copy Delete | 1 | John | Doe | john@mail.com | Admin | jd123 |
| <input type="checkbox"/> | Edit Copy Delete | 2 | Juliet | Niowan | jul@mail.com | juli57 | jn1234 |
| <input type="checkbox"/> | Edit Copy Delete | 3 | Jain | Lorien | jainl@mail.com | jain32 | jl567 |
| <input type="checkbox"/> | Edit Copy Delete | 4 | Hena | Winload | henaw@mail.com | hw123 | hena890 |
| <input type="checkbox"/> | Edit Copy Delete | 5 | Michel | Newon | mnew@mail.com | mine12 | mn456 |

Prepared Statement

Prepared Statements

- If we want to insert any data from external sources (like user input), it is very important that the data is sanitized and validated.
- A prepared statement is a feature used to execute the same (or similar) SQL statements repeatedly with high efficiency.
 - Prepare: An SQL statement template is created and sent to the database. Certain values are left unspecified, called parameters (labeled "?"). Example: `INSERT INTO users VALUES(?, ?, ?)`
 - The database parses, compiles, and performs query optimization on the SQL statement template, and stores the result without executing it.
 - Execute: At a later time, the application binds the values to the parameters, and the database executes the statement. The application may execute the statement as many times as it wants with different values


```
dbh.php x index.php x submit.php
<?php
    include_once 'dbh.php';
?>

<!DOCTYPE html>
<!DOCTYPE html>
<html>
<head>
    <title>Connect to Database</title>
</head>
<body>

<?php

    $sql = "SELECT * FROM users WHERE user_uid= 'Admin'";
    $result = mysqli_query($conn, $sql);
    $resultCheck = mysqli_num_rows($result);

    if($resultCheck > 0){
        while ($row = mysqli_fetch_assoc($result)) //$row in
        {
            echo $row['user_first']."<br>"; //$row fetch Nam
        }
    }
?>

</body>
</html>
```

Prepared Statements ... Catch Data

```
<?php
    include_once 'dbh.php';
?>

<!DOCTYPE html>
<html>
<head>
    <title>Connect to Database</title>
</head>
<body>

<?php
$data = "Admin";

//create a template
$sql = "SELECT * FROM users WHERE user_uid= ?;";

//create a prepared statement
$stmt = mysqli_stmt_init($conn);

//Prepare the prepared statement
//Always check faild situation of php code
if (!mysqli_stmt_prepare($stmt, $sql)) {
    echo "SQL Statement Failed";
}
else {
    //Bind parameters to the placeholder
    mysqli_stmt_bind_param($stmt, "s", $data);

    //Run parameters inside Database
    mysqli_stmt_execute($stmt);
    $result = mysqli_stmt_get_result($stmt);

    while ($row = mysqli_fetch_assoc($result)){ //$row in this case is an Array

        echo $row['user_first']."<br>";} //$row fetch Name of the columns
    }
?>
```

i - integer
d - double
s - string

Prepared Statements ... user input

Niman

Aroua

E-mail

Username

Password

SUBMIT

```
<?php

include 'dbh.php';

//create variables
$first = mysqli_real_escape_string($conn, $_POST['first']);
$last = mysqli_real_escape_string($conn, $_POST['last']);
$email = mysqli_real_escape_string($conn, $_POST['email']);
$uid = mysqli_real_escape_string($conn, $_POST['uid']);
$pwd = mysqli_real_escape_string($conn, $_POST['pwd']);

$sql = "INSERT INTO users (user_first, user_last, user_email, user_uid, user_pwd) VALUES(?, ?, ?, ?, ?);";

//create prepare statement
$stmt = mysqli_stmt_init($conn);

//Prepare the prepared statement
if(!mysqli_stmt_prepare($stmt, $sql)){
    echo "SQL error";
} else{
    mysqli_stmt_bind_param($stmt, "sssss", $first, $last, $email, $uid, $pwd);

    mysqli_stmt_execute($stmt);
}

header("location: index.php?submit=success"); //after submission back to first page
```

| | user_id | user_first | user_last | user_email |
|---|---------|------------|-----------|----------------|
| <input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete | 1 | John | Doe | john@mail.com |
| <input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete | 2 | Juliet | Niowan | jul@mail.com |
| <input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete | 3 | Jain | Lorien | jainl@mail.com |
| <input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete | 4 | Hena | Winload | henaw@mail.com |
| <input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete | 5 | Michel | Newon | mnew@mail.com |
| <input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete | 9 | Niman | Aroua | nim@mail.com |

از توجه شما به این بخش سپاسگزارم.