

UNIT 4: SOLVED EXERCISES Mysql

CONNECTION

login.php

```
<?php
$servername = "localhost";
$username = "dwes";
$password = "2DAWdwes";
$dbname = "ies";
?>
```

SELECT (PROCEDURAL-Only this one)

Show number and name of all employees

```
<?php
require_once 'login.php';
$conn = mysqli_connect($servername, $username, $password, $dbname);

if (!$conn) { die("Fail connection: " . mysqli_connect_error());}

$sql = "select * from emp";
$result = mysqli_query($conn,$sql);

if (mysqli_num_rows($result) > 0) {
    while($fila = mysqli_fetch_array($result)) {
        echo "Emp number: ".$fila["empno"]." Name: ".$fila["ename"]."<br>";
    } else {
        echo "There is no records";
    }
}

mysqli_close($conn);
?>
```

SELECT (OO)

```
<?php
require_once 'login.php';
$conn = new mysqli($servername, $username, $password, $dbname);
if ($conn->connect_error) {
    die("Fatal Error: " . $conn->connect_error);
}

$query = "select * from emp";
$result = $conn->query($query);
if (!$result) die("Fatal Error");

$rows = $result->num_rows; // number of rows
```

```

for ($j = 0 ; $j < $rows ; ++$j)
{
$row = $result->fetch_assoc();
echo 'Employee: ' . htmlspecialchars($row['ename']) . '<br>';
}
$result->close();
$conn->close();
?>

```

Displays the name of an employee whose empno has been entered through a form

SELECT (OO STATEMENT) I (Imagine we read the empno from a form)

```

<?php
require_once 'login.php';
$conn = new mysqli($servername, $username, $password, $dbname);
if ($conn->connect_error) {
    die("Fatal Error: " . $conn->connect_error);
}

```

```

$id=7782; //use a form for this information with $_POST
$sql = "SELECT * FROM emp WHERE empno=?";
$stmt = $conn->prepare($sql);
$stmt->bind_param("i", $id);
$stmt->execute();
$result = $stmt->get_result();
while ($row = $result->fetch_assoc())
{
    echo $row['ename']; }

?>

```

SELECT (OO STATEMENT) II

Same but separate the database interaction from the HTML output.

Same code but instead of while....

```

$data = $result->fetch_all(MYSQLI_ASSOC);
header("Location:show.php?data=".serialize($data));

```

```

show.php
<?php
$data=unserialize($_GET['data']);
foreach($data as $row)
echo $row['ename'];
?>

```

Note: Pass an array as \$_GET you must use serialize to send and unserialize to receive

INSERT (same form, two insert.php)

form.php

```
<body>
<form action="insert.php" method="POST">
Number
<input type="text" name="num"/><br/>
Name
<input type="text" name="name"/><br/>
Location
<input type="text" name="loc"/><br/>
<input type="submit" name="boton" value="Insert"/>
</form>
</body>
```

INSERT OO

insert.php

```
<?php
require_once 'login.php';
$num=$_POST['num'];
$name=$_POST['name'];
$loc=$_POST['loc'];

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

if ($conn->connect_error) { die("Error ". $conn->connect_error); }
$sql="INSERT INTO dept VALUES($num,'$name','$loc)";
if ($conn->query($sql)) { echo "Correct"; }
else { echo "Fail INSERT"; }
$conn->close();
?>
```

INSERT OO STATEMENT (BEST OPTION)

insert.php

```
<?php
require_once 'login.php';
$num=$_POST['num'];
$name=$_POST['name'];
$loc=$_POST['loc'];

$conn = new mysqli($servername, $username, $password, $dbname);
if ($conn->connect_error) { die("Error ". $conn->connect_error); }
$sql="INSERT INTO dept VALUES (?, ?, ?)";
$stmt = $conn->prepare($sql);
$stmt->bind_param("iss", $num, $name,$loc);

$stmt->execute();
$conn->close();
?>
```

DELETE OO

form.php

```
<?php
require_once 'login.php';
$conn = new mysqli($servername, $username, $password, $dbname);
if ($conn->connect_error) {
    die("Fatal Error: " . $conn->connect_error);
}
$query = "select * from dept";
$result = $conn->query($query);
if (!$result) die("Fatal Error");

echo "<form action='delete.php' method='POST'>";
echo "Choose department to delete: <br>";
echo "<select name='dep'>";
while ($fila = mysqli_fetch_array($result))
{
    echo "<option value=\".$fila['deptno'].>",$fila['dname']. "</option>";
}
echo "</select>";
echo "<input type='submit' value='Delete' />";
echo "</form>";

?>
```

delete.php

```
<?php
require_once 'login.php';
$conn = new mysqli($servername, $username, $password, $dbname);
if ($conn->connect_error) { die("Error ".$conn->connect_error); }
$sql="DELETE FROM dept WHERE DEPTNO=".$_POST['dep'];
if ($conn->query($sql)) {echo "Correct";}
else {echo "Fail in the DELETE";}
$conn->close();

?>
```

UPDATE OO:

First: same form as delete:form.php (with action='updateform.php')

updateform.php

```
<?php
require_once 'login.php';
$conn = new mysqli($servername, $username, $password, $dbname);
if ($conn->connect_error) {
    die("Fatal Error: " . $conn->connect_error);
}

$dep=$_POST['dep'];
$sql = "SELECT * FROM dept WHERE deptno=?";
```

```

$stmt = $conn->prepare($sql);
$stmt->bind_param("i", $dep);
$stmt->execute();
$result = $stmt->get_result();
$row = $result->fetch_assoc();
?>
<form action="update.php" method="post">
<input type="hidden" name="deptno" value="<?php echo $row['deptno'];?>" />
Name Hotel <input type="text" name="dname" value="<?php echo $row['dname'];?>" /><br/>
loc <input type="text" name="loc" value="<?php echo $row['loc'];?>" /><br/>
<input type="submit" value="Modify" />
</form>

```

```

update.php
<?php
require_once 'login.php';
$deptno=$_POST['deptno'];
$dname=$_POST['dname'];
$loc=$_POST['loc'];
$conn = new mysqli($servername, $username, $password, $dbname);
if ($conn->connect_error) { die("Error ". $conn->connect_error); }
$sql="UPDATE dept SET dname='$dname', loc='$loc' WHERE DEPTNO=$deptno";
if ($conn->query($sql)) { echo "Correct"; }
else { echo "Fail in the UPDATE"; }
$conn->close();
?>

```

MULTIPLE QUERIES

```

<?php
require_once 'login.php';

$conn = new mysqli($servername, $username, $password, $dbname);
if ($conn->connect_error) { die("Error ". $conn->connect_error); }

$sql="INSERT INTO dept VALUES(50,'RRHH1','NEW YORK');";
$sql.="INSERT INTO dept VALUES(60,'RRHH2','LA');";
$sql.="INSERT INTO dept VALUES(70,'RRHH3','CALIFORNIA)";
if ($conn->multi_query($sql)) { echo "Correct"; }
else { echo "Fail in the INSERT"; }
$conn->close();
?>

```

WORK WITH DATES:

Field form: input type=date. Form to insert an employee

```

<body>
<form action="insert.php" method="POST">
Number
<input type="text" name="num" /><br/>

```

Name

```
<input type="text" name="name"/><br/>
```

Date

```
<input type="date" name="data"/><br/>
```

Dep

```
<input type="text" name="dep"/><br/>
```

```
<input type="submit" name="boton" value="Insert"/>
```

```
</form>
```

```
</body>
```

Solution1: insert.php

```
<?php
require_once 'login.php';
$num=$_POST['num'];
$name=$_POST['name'];
$data=$_POST['data'];
$dep=$_POST['dep'];

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

if ($conn->connect_error) { die("Error ".$conn->connect_error); }
$sql="INSERT INTO emp (empno, ename, hiredate,deptno)
VALUES ($num, '$name', '$data', $dep)";

if ($conn->query($sql)) { echo "Correct"; }
else { echo "Fail INSERT"; }
$conn->close();
?>
```

Note: You should write ‘ ‘ to insert the data value

Solution2: insert.php (More secure. Prepared statements)

```
<?php
require_once 'login.php';
$num=$_POST['num'];
$name=$_POST['name'];
$data=$_POST['data'];
$dep=$_POST['dep'];

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

if ($conn->connect_error) { die("Error ".$conn->connect_error); }
$sql="INSERT INTO emp (empno, ename, hiredate, deptno) VALUES (?, ?, ?, ?)";
$stmt = $conn->prepare($sql);
$stmt->bind_param("issi", $num,$name,$data,$dep);
$stmt->execute();
$conn->close();
?>
```

Solution3: Delete the data field in the form. And insert the ACTUAL MOMENT as date. Write NOW() instead of a ?:

```
<?php
require_once 'login.php';
$num=$_POST['num'];
$name=$_POST['name'];
//$data=$_POST['data'];
$dep=$_POST['dep'];

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

if ($conn->connect_error) { die("Error ".$conn->connect_error); }
$sql="INSERT INTO emp (empno, ename,deptno, hiredate) VALUES
(?, ?, ?, NOW())";
$stmt = $conn->prepare($sql);
$stmt->bind_param("isi", $num,$name,$dep);
$stmt->execute();
$conn->close();

?>
```

Print the date in Spanish format:

```
<?php
require_once 'login.php';

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

if ($conn->connect_error) { die("Error ".$conn->connect_error); }

$query = "select ename, DATE_FORMAT(hiredate, '%d/%m/%Y') as hiredate from
emp";
$result = $conn->query($query);
if (!$result) die("Fatal Error");

$rows = $result->num_rows; // number of rows
for ($j = 0 ; $j < $rows ; ++$j)
{
    $row = $result->fetch_assoc();
    echo 'Employee: '. htmlspecialchars($row['ename']) .' ' . $row['hiredate'] .
    '<br>';
}

?>
```

PASSWORDS:

I have create this table in “ies” database

```
CREATE TABLE users (  
id smallint(5) unsigned NOT NULL auto_increment,  
user varchar(10),  
password longtext,  
name varchar(100) NOT NULL,  
PRIMARY KEY (id)  
);
```

I have this form to insert the information:

```
<form action="insert.php" method="POST">  
  
  <label>user: </label><input type="text" name="user"/><br/><br/>  
  <label>name: </label><input type="text" name="name"/><br/><br/>  
  <label>Password: </label><input type="password" name="password"/> <br/><br/>  
  <input type="submit" name="button" value="Send"/>  
</form>
```

```
insert.php  
<?php  
require_once 'login.php';  
$conn = new mysqli($servername, $username, $password, $dbname);  
if ($conn->connect_error) {  
    die("Fatal Error: " . $conn->connect_error);  
}  
  
$user = $_POST["user"];  
$name = $_POST["name"];  
$pass = $_POST["password"];  
$strongpass = password_hash($pass, PASSWORD_DEFAULT);  
$sql = "INSERT INTO users values (null,'$user','$strongpass','$name')";  
  
if ($conn->query($sql)) { echo "Correct"; }  
else { echo "Fail INSERT"; }  
$conn->close();  
?>
```

Check the user and password inserted. In the previous exercise I have inserted user marta with password 123. With this code the result is "Correct password"


```
<?php
require_once 'login.php';

$conn = new mysqli($servername, $username, $password, $dbname);
if ($conn->connect_error) { die("Error ".$conn->connect_error); }

$pass='123';
$sql = "SELECT password FROM users WHERE user='marta'";
$result = $conn->query($sql);
if (!$result) die("Fatal Error");
$row = $result->fetch_assoc();
if (password_verify($pass, $row['password'])) echo 'Correct Password';
else echo 'Incorrect Password';

$conn->close();
?>
```