UNIT 4: SOLVED EXERCISES. PDO

Same login.php

SELECT: Select all employees

```php
<?php
require_once 'login.php';
try
{
$pdo = new PDO("mysql:host=$servername;dbname=$dbname",$username, $password);
$pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
$pdo->exec('SET NAMES "utf8"');
$sql = "select * from emp";
$result = $pdo->query($sql);
while ($row = $result->fetch())
{
echo 'Employee: '. htmlspecialchars($row['ename']) . '<br>';
}
}
catch (PDOException $e)
{
echo 'Unable to connect to the database server: ' . $e->getMessage();
exit();
}
echo 'Database connection established.';
$pdo = null;
?>
```

DELETE Delete a depart

form.php
```php
<?php
require_once 'login.php';
try
{
$pdo = new PDO("mysql:host=$servername;dbname=$dbname",$username, $password);
$pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
$pdo->exec('SET NAMES "utf8"');
$sql = "select * from dept";
$result = $pdo->query($sql);
echo "<form action='delete.php' method='POST'>";
echo "Choose department to delete: <br>";
echo "<select name='dep'>";
while ($fila = $result->fetch())
{
echo "<option value=".$fila['deptno'].">",$fila['dname']."</option>";
}
echo "</select>";
echo "<input type='submit' value='Delete' />";
echo "</form>";
```

```php
}
catch (PDOException $e)
{
echo 'Unable to connect to the database server: ' . $e->getMessage();
exit();
}
$pdo = null;
?>
```

delete.php
```php
<?php
require_once 'login.php';
try
{
$pdo = new PDO("mysql:host=$servername;dbname=$dbname",$username, $password);
$pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
$pdo->exec('SET NAMES "utf8"');
$sql="DELETE FROM dept WHERE DEPTNO=".$_POST['dep'];
$affectedRows = $pdo->exec($sql);
}
catch (PDOException $e)
{
echo 'Unable to connect to the database server: ' . $e->getMessage();
exit();
}
echo "Deleted $affectedRows rows.";
$pdo = null;
?>
```

INSERT (same form, two insert.php with prepared statement)
Insert a depart

form.php
```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 with bindValue

insert.php

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

try
{
$pdo = new PDO("mysql:host=$servername;dbname=$dbname",$username, $password);
$pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
$pdo->exec('SET NAMES "utf8"');
$sql = 'INSERT INTO dept values (:deptno,:dname,:loc)';
$stmt = $pdo->prepare($sql);
$stmt->bindValue(':deptno', $num);
$stmt->bindValue(':dname', $name);
$stmt->bindValue(':loc', $loc);
$stmt->execute();
}
catch (PDOException $e)
{
echo 'Unable to connect to the database server: ' . $e->getMessage();
exit();
}
echo 'Database connection established.';
$pdo = null;
?>
```

INSERT (with ???)

insert.php

```php
<?php
require_once 'login.php';
$num=$_POST['num'];
$name=$_POST['name'];
$loc=$_POST['loc'];
try
{
$pdo = new PDO("mysql:host=$servername;dbname=$dbname",$username, $password);
$pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
$pdo->exec('SET NAMES "utf8"');
$sql = 'INSERT INTO dept values (?,?,?)';
$stmt = $pdo->prepare($sql);
$stmt->execute([$num,$name,$loc]);
}
catch (PDOException $e)
{
echo 'Unable to connect to the database server: ' . $e->getMessage();
exit();
```

```
}
$pdo = null;
?>
```

TRANSACTIONS:

Without using transactions inserts the first two departments, because the third is repeated

```php
<?php
require_once 'login.php';
try
{
$pdo = new PDO("mysql:host=$servername;dbname=$dbname",$username, $password);
$pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
$pdo->exec('SET NAMES "utf8"');
 $pdo->exec("insert into dept values (22, 'dep22', 'Madrid')");
 $pdo->exec("insert into dept values (23, 'dep23', 'Valencia')");
 $pdo->exec("insert into dept values (23, 'dep24', 'Valencia')");
}

catch (PDOException $e)
{
 echo "Failed: " . $e->getMessage();
}
$pdo = null;
?>
```

Using transactions the rollback undoes everything and nothing is inserted

```php
<?php
require_once 'login.php';
try
{
$pdo = new PDO("mysql:host=$servername;dbname=$dbname",$username, $password);
$pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
$pdo->exec('SET NAMES "utf8"');
$pdo->beginTransaction();
 $pdo->exec("insert into dept values (22, 'dep22', 'Madrid')");
 $pdo->exec("insert into dept values (23, 'dep23', 'Valencia')");
 $pdo->exec("insert into dept values (23, 'dep24', 'Valencia')");
 $pdo->commit();//save changes
}

catch (PDOException $e)
{
$pdo->rollBack(); //undo changes
 echo "Failed: " . $e->getMessage();
}
$pdo = null;
?>
```

UPDATE:

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

updateform.php
```php
<?php
require_once 'login.php';
$dep=$_POST['dep'];
try
{
$pdo = new PDO("mysql:host=$servername;dbname=$dbname",$username, $password);
$pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
$pdo->exec('SET NAMES "utf8"');
$sql = "SELECT * FROM dept WHERE deptno=$dep";
$result = $pdo->query($sql);
$row = $result->fetch();
?>
<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>
<?php
}
catch (PDOException $e)
{
echo 'Unable to connect to the database server: ' . $e->getMessage();
exit();
}
$pdo = null;
?>
```

update.php
```php
<?php
require_once 'login.php';
$deptno=$_POST['deptno'];
$dname=$_POST['dname'];
$loc=$_POST['loc'];
try
{
$pdo = new PDO("mysql:host=$servername;dbname=$dbname",$username, $password);
$pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
$pdo->exec('SET NAMES "utf8"');
$sql="UPDATE dept SET dname='$dname', loc='$loc' WHERE DEPTNO=$deptno";
$affectedRows = $pdo->exec($sql);
}
catch (PDOException $e)
{echo 'Unable to connect to the database server: ' . $e->getMessage();
exit();}
echo "Department Updated";
$pdo = null;?>
```