

PHP and MySQL

the basics in 15 slides

But first

- Principle of Least Privilege
 - A user (or process) should have the lowest level of privilege required in order to perform his/her assigned task.

Principle of Least Privilege

- not -> root
 - can change everything

```
CREATE DATABASE IF NOT EXISTS aliendb;  
GRANT ALL PRIVILEGES ON aliendb.* to 'alienuser'@'localhost'  
identified by 'alien';
```

ROOT have password?

- if not

```
SET PASSWORD FOR 'root'@'localhost' = PASSWORD('f3jga908');
```

Back to PHP & MySQL

4 basic steps

1. connect with `mysqli_connect()`
2. assemble the query string
3. execute the query with `mysqli_query()`
4. close the connection with `mysqli_close()`

1. connect with mysqli_connect()

1. 2 3 4

```
$db = mysqli_connect('localhost', 'alienuser', 'alien', 'aliendb')  
or die ("ERROR: connecting to mysql server!");
```

1. The SQL server location (IP address or hostname)
2. The database user name
3. the user's password
4. The database name

db_connect.php

(7) add this to report2.php
result: see nothing if it works
error message if error

4 basic steps

~~1. connect with `mysqli_connect()`~~

2. assemble the query string

3. execute the query with `mysqli_query()`

4. close the connection with `mysqli_close()`

assemble the query string

```
$query= "INSERT INTO abductions  
(firstname, lastname) VALUES('Ann',  
'Smith')";
```

```
$query2= "SELECT * FROM abductions";
```

4 basic steps

- ~~1. connect with `mysqli_connect()`~~
- ~~2. assemble the query string~~
3. execute the query with `mysqli_query()`
4. close the connection with `mysqli_close()`

execute the query with mysqli_query()

```
$result = mysqli_query($db, $query)  
or die("Error Querying Database");
```

4 basic steps

- ~~1. connect with `mysqli_connect()`~~
- ~~2. assemble the query string~~
- ~~3. execute the query with `mysqli_query()`~~
4. close the connection with `mysqli_close()`

close the connection with mysqli_close()

```
mysqli_close($db);
```

Full Recipe

```
$db = mysqli_connect('localhost', 'alienuser', 'alien', 'aliendb')  
    or die ("ERROR: connecting to mysql server!");  
  
$query= "INSERT INTO programmers (name, language) VALUES('Ann',  
'Python')";  
  
$result = mysqli_query($db, $query)  
    or die("Error Querying Database");  
  
mysqli_close($db);
```

```
$query = "SELECT * FROM abduction_reports ORDER BY  
        date_abducted";
```

```
while($row = mysqli_fetch_array($result)) {  
    $firstname = $row['firstname'];  
    $lastname = $row['lastname'];  
    $date = $row['date_abducted'];  
    $city = $row['city'];  
    $state = $row['state_abducted'];  
    echo "<tr><td    >$date</td><td    >$firstname $lastname</td></tr>\n";  
}
```


Tasks

1. source provided sql file
2. rename report2.php and copy report2mysql.php to report2.php
3. test - should get name in db and see list of abductions
4. add date and location into db.
5. fix list.php to show date and location in list of abductions.

</end>

demo

Partner task

- create simple blog site.
(I will demo example)