Updated 4/5/22

Lab 9.1 SQLi Review

> 💡You were exposed to basic SQL Injection in SEC260 - Web and Application Security. It is a very common method of exploitation and deserves some consideration and review in this class.

Preparation

Mysqld configuration on Kali

```
sudo systemctl enable mysqld
sudo systemctl start mysqld
sudo mysql_secure_installation
```

- Note, current root password for mysql is nothing so hit [Enter]

```
Switch to unix_socket authentication [Y/n] n
Change the root password? [Y/n] Y
Remove anonymous users?
Disallow root login remotely? [Y/n] y[Y/n] y
Remove test database and access to it? [Y/n] y
Reload privilege tables now? [Y/n] y
```

clone the sqli-labs-php git repository

```
mkdir -p ~/sec335/week9
cd ~/sec335/week9
git clone https://github.com/skyblueee/sqli-labs-php7.git
cd sqli-labs-php7
```

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edit sql-connections/db-creds.inc

```
 GNU nano 5.4                                    sql-connections/db-creds.inc
<?php

//give your mysql connection username n password
$dbuser ='root';
$dbpass ='                ';
$dbname ="security";
$host = 'localhost';
$dbname1 = "challenges";
```

start the application

access the application and click on the Setup/reset Database for labs link.

```
File  Actions  Edit  View  Help
champuser@kali: ~/sec335/week9/sqli-labs-php7 ×   champuser@kali: ~/sec335/week9/sqli-labs-php7/Less-1 ×

┌──(champuser㉿kali)-[~/sec335/week9/sqli-labs-php7]
└─$ pwd
/home/champuser/sec335/week9/sqli-labs-php7

┌──(champuser㉿kali)-[~/sec335/week9/sqli-labs-php7]
└─$ php -S 127.0.0.1:8090 -t .
[Tue Apr  5 16:30:15 2022] PHP 8.1.2 Development Server (http://127.0.0.1:8090) started
```

SQL Injections × +

127.0.0.1:8090

SQLi-LABS Page-1(Basic Challenges)

Setup/reset Database for labs 1

Page-2 (Advanced Injections)

Page-3 (Stacked Injections)

Page-4 (Challenges)

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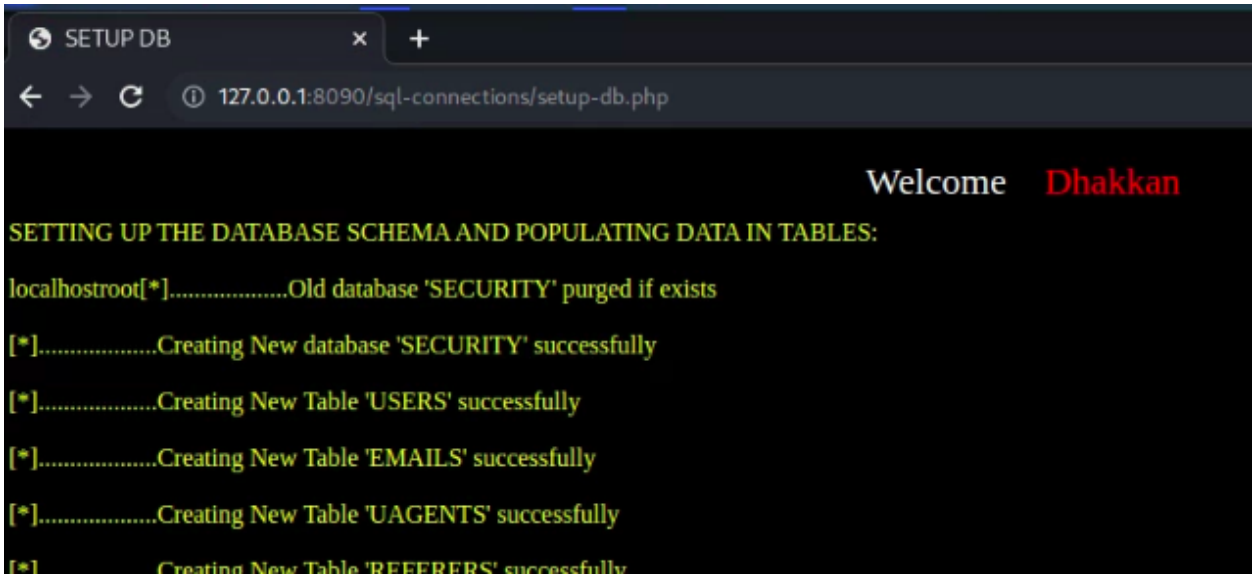

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Deliverables

`Add increased error handling and a debug statement for the raw sql as shown below.  By default php8 will suppress many of the error messages.`

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Go through the following SQLi walk through
Capture and label screenshots for:

1. Display the Login name and password for arbitrary user
2. Error condition when number of columns are exceeded
3. A Union select that displays your own value for login name and password
4. Another union that displays the mysql user and database
5. A union that dumps all the tables in the current database
6. A union that dumps all the usernames and passwords

Deliverable 7. Figure out how to run sqlmap against the vulnerable uri: http://127.0.0.1:8090/Less-1?id=1

- Run this using Medium Difficulty and Intermediate Enumeration.
- Figure out how to dump the contents of the users table in the security database.
- Provide a screenshot showing the results of dumping the user's table.