

# **Password Security Analysis Report**

OS: Kali Linux

Tools Used: John the Ripper, Hashcat

Wordlist: rockyou.txt

## **Aim**

To understand password security and crack weak password hashes using John the Ripper and Hashcat.

## **Procedure & Result**

Using John the Ripper

Command used:

```
$ john --format=Raw-SHA1 --wordlist=/usr/share/wordlists/rockyou.txt hash2.txt
```

Result:

The password was successfully cracked.

Cracked password: password

(Screenshot attached)

Using Hashcat

Command used:

```
hashcat -m 100 -a 0 hash2.txt /usr/share/wordlists/rockyou.txt
```

Result:

The same password was cracked using Hashcat.

Cracked password: password

(Screenshot attached)

## **Observation**

Weak passwords are present in common wordlists. SHA-1 hash is fast and insecure. Both tools cracked the password instantly.

## **Conclusion**

This experiment shows that weak passwords can be easily cracked using John the Ripper and Hashcat. Strong passwords and multi-factor authentication are required for better security.

## **Result**

Password successfully cracked using both John the Ripper and Hashcat.

