Convert Shadow File to John Format

```
unshadow {shadowFile} {passwdFile} > {crackFile}
```

If you have access to both the /etc/passwd and /etc/shadow file, this command will convert the shadow file into a format that John can recognise.
shadowFile - the shadow file
passwdFile - the passwd file
crackFile - the file name to export the formatted hashes to, ready for cracking with John

Specify Which User to Target

```
john --user={user}
```

Will specify the specified user. If a "-" is placed in front of the username, it will target all users except that specified.
user - the username as per the shadow file.

Cracking using a Wordlist

```
john --wordlist={wordlist} {hashFile}
```

To use a wordlist, use the --wordlist flag. The "rockyou" wordlist is a comprehensive list which is located at `/usr/share/wordlists/rockyou.txt` on Kali.
wordlist - the word list to use
hashFile - the file containing hashes, or converted shadow file for cracking

Single Crack Mode

```
john --single {hashes}
```

Attempts variations on the username as the password.
hashes - text file containing hashes

Brute Forcing

```
john --incremental={option} {hashes}
```

Will attempt a brute force attack based on the option specified
option - corresponds to one of the options within the `john.conf` or `john.ini` file
hashes - text file containing hashes

Config File

```
[Incremental:Alnum]
File = $JOHN/alnum.chr
MinLen = 1
```

```
MaxLen = 13
CharCount = 62
```

The configuration file is very powerful. However, for common brute-force attacks, it is the `[Incremental:*]` sections that will be modified.

The MinLen parameter can be modified to set the minimum length to brute force; the MaxLen specifies the maximum length to brute force. If you know that a website's password policy requires passwords to be alphanumeric and between 8 and 12 characters, this can be specified by modifying the configuration file, for example.

The `john.conf` file is most likely stored in `/etc/john/john.conf`, but can be found by running the `find / -name john.conf` command.