241901023 DHANALAKSHMI.C

Ex.No: 3 *Date:15/08/2025*

PASSIVE AND ACTIVE RECONNAISSANCE

AIM:

To do perform passive and active reconnaissance in TryHackMe platform.

ALGORITHM:

1. Access the Passive reconnaissance lab in TryHackMe platform using the link below- https://tryhackme.com/r/room/passiverecon

2. Click Start AttackBox to run the instance of Kali Linux distribution.

3. Run whois command on the website tryhackme.com and gather information about it.

4. Find the IP address of tryhackme.com using nslookup and dig command.

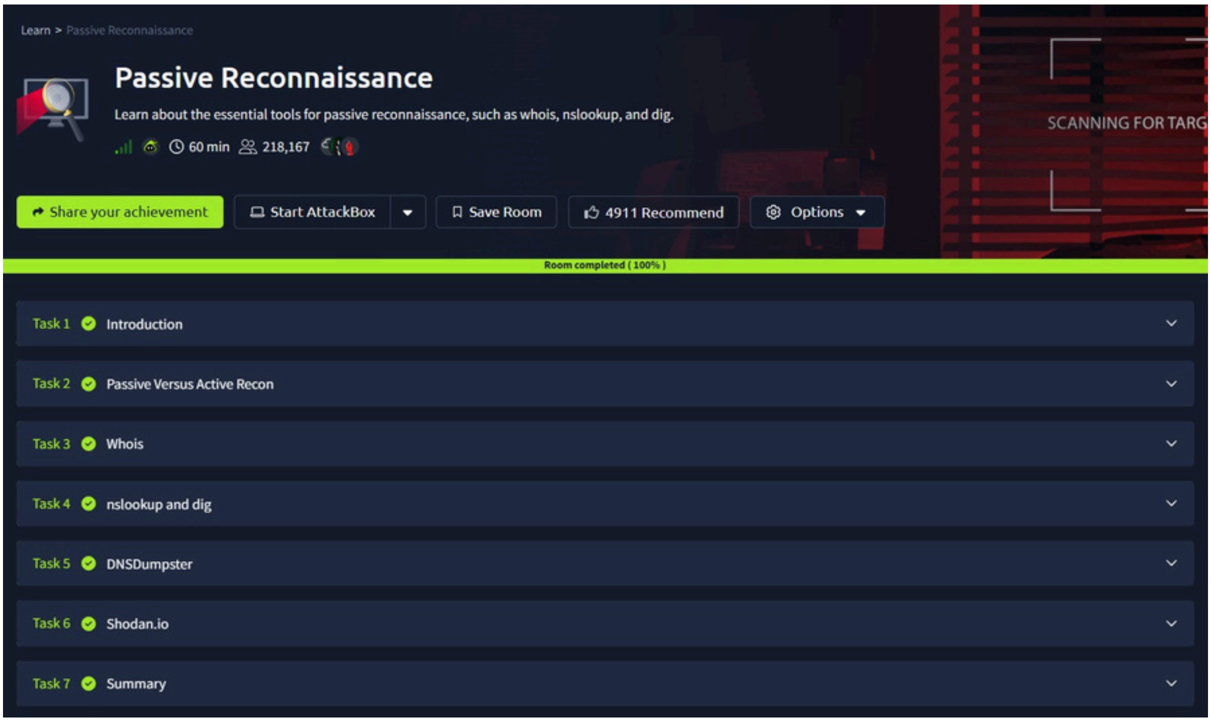
5. Find out the subdomain of tryhackme.com using DNSDumpster command.

6. Run shodan.io to find out the details- IP address, Hosting Company, Geographical location and Server type and version.

7. Access the Active reconnaissance lab in TryHackMe platform using the link below- https://tryhackme.com/r/room/activerecon

8. Click Start AttackBox to run the instance of Kalilinux distribution.

9. Perform active reconnaissance using the commands, traceroute, ping and netcat.



Passive Reconnaissance

Learn about the essential tools for passive reconnaissance, such as whois, nslookup, and dig.

Task 1 ✓ Introduction

Task 2 ✓ Passive Versus Active Recon

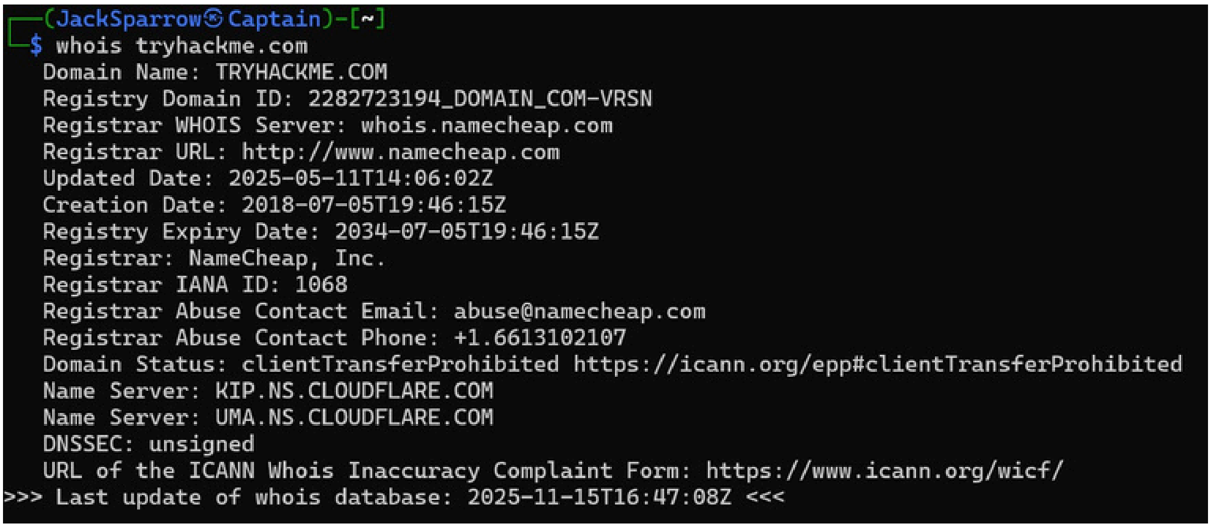
Task 3 ✓ Whois

Task 4 ✓ nslookup and dig

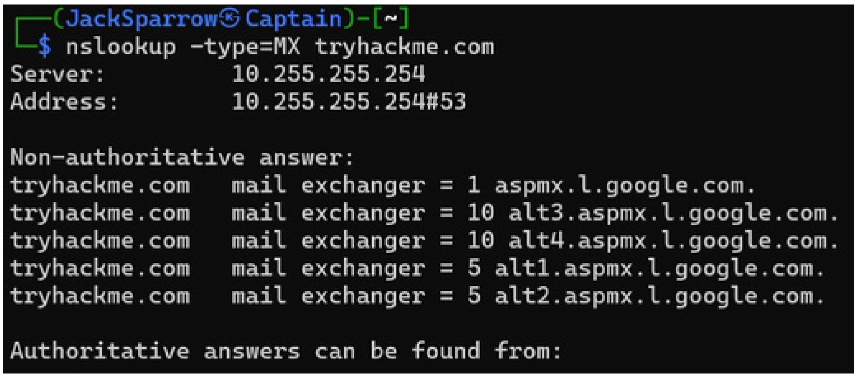
Task 5 ✓ DNSDumpster

Task 6 ✓ Shodan.io

Task 7 ✓ Summary



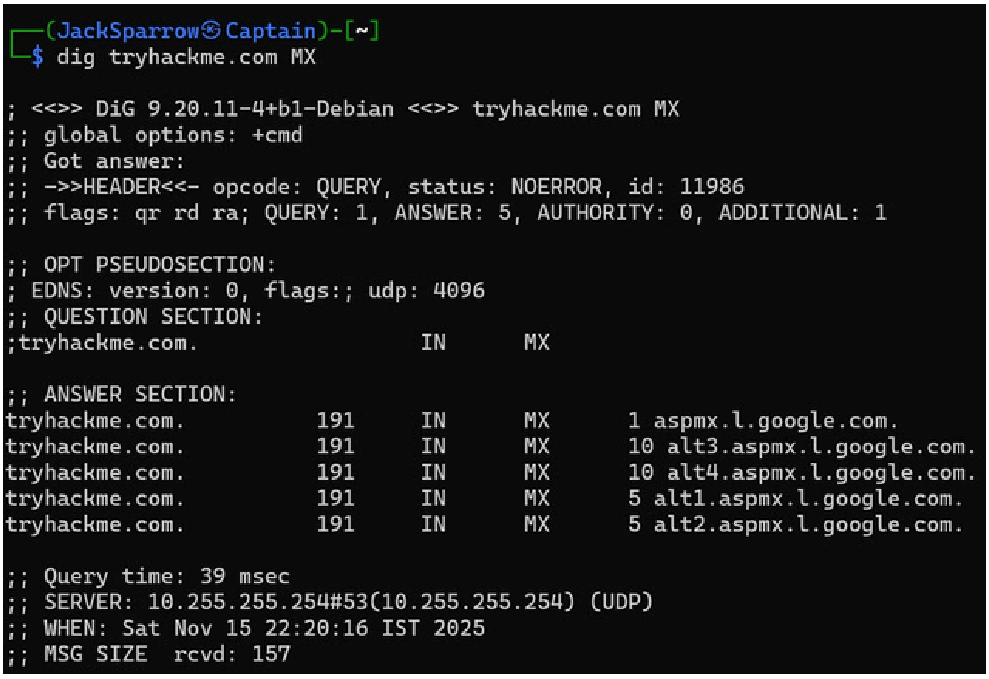
```
┌──(JackSparrow㉿Captain)-[~]
└─$ whois tryhackme.com
   Domain Name: TRYHACKME.COM
   Registry Domain ID: 2282723194_DOMAIN_COM-VRSN
   Registrar WHOIS Server: whois.namecheap.com
   Registrar URL: http://www.namecheap.com
   Updated Date: 2025-05-11T14:06:02Z
   Creation Date: 2018-07-05T19:46:15Z
   Registry Expiry Date: 2034-07-05T19:46:15Z
   Registrar: NameCheap, Inc.
   Registrar IANA ID: 1068
   Registrar Abuse Contact Email: abuse@namecheap.com
   Registrar Abuse Contact Phone: +1.6613102107
   Domain Status: clientTransferProhibited https://icann.org/epp#clientTransferProhibited
   Name Server: KIP.NS.CLOUDFLARE.COM
   Name Server: UMA.NS.CLOUDFLARE.COM
   DNSSEC: unsigned
   URL of the ICANN Whois Inaccuracy Complaint Form: https://www.icann.org/wicf/
>>> Last update of whois database: 2025-11-15T16:47:08Z <<<
```



```
┌──(JackSparrow㉿Captain)-[~]
└─$ nslookup -type=MX tryhackme.com
Server:         10.255.255.254
Address:        10.255.255.254#53

Non-authoritative answer:
tryhackme.com   mail exchanger = 1 aspmx.l.google.com.
tryhackme.com   mail exchanger = 10 alt3.aspmx.l.google.com.
tryhackme.com   mail exchanger = 10 alt4.aspmx.l.google.com.
tryhackme.com   mail exchanger = 5 alt1.aspmx.l.google.com.
tryhackme.com   mail exchanger = 5 alt2.aspmx.l.google.com.

Authoritative answers can be found from:
```



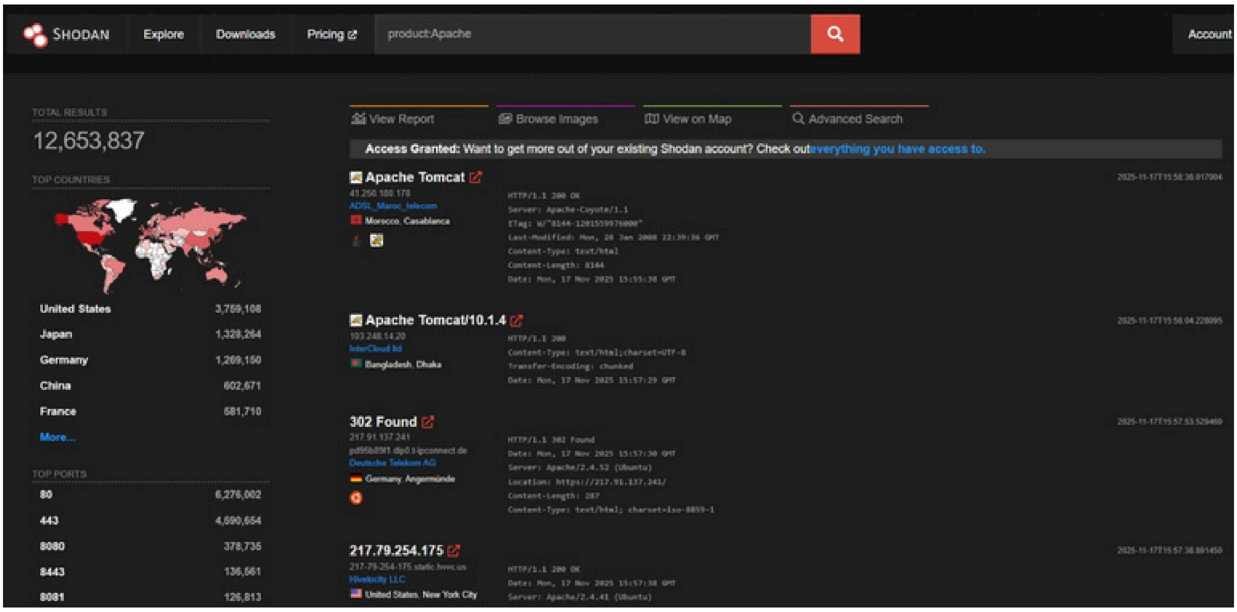
```
┌──(JackSparrow㉿Captain)-[~]
└─$ dig tryhackme.com MX

; <<>> DiG 9.20.11-4+b1-Debian <<>> tryhackme.com MX
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 11986
;; flags: qr rd ra; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 4096
;; QUESTION SECTION:
;tryhackme.com.                 IN      MX

;; ANSWER SECTION:
tryhackme.com.          191     IN      MX      1 aspmx.l.google.com.
tryhackme.com.          191     IN      MX      10 alt3.aspmx.l.google.com.
tryhackme.com.          191     IN      MX      10 alt4.aspmx.l.google.com.
tryhackme.com.          191     IN      MX      5 alt1.aspmx.l.google.com.
tryhackme.com.          191     IN      MX      5 alt2.aspmx.l.google.com.

;; Query time: 39 msec
;; SERVER: 10.255.255.254#53(10.255.255.254) (UDP)
;; WHEN: Sat Nov 15 22:20:16 IST 2025
;; MSG SIZE  rcvd: 157
```



product:Apache

TOTAL RESULTS

12,653,837

TOP COUNTRIES

United States	3,759,108
Japan	1,328,264
Germany	1,269,150
China	602,671
France	581,710

More...

TOP PORTS

80	6,276,002
443	4,690,654
8080	378,735
8443	136,561
8081	126,813

Access Granted: Want to get more out of your existing Shodan account? Check outeverything you have access to.

Apache Tomcat
41.250.100.178
ADSL_Maroc_telecom
Morocco, Casablanca
2025-11-17T15:58:36.017004

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
ETag: W/"8144-1201559976000"
Last-Modified: Mon, 28 Jan 2008 22:39:36 GMT
Content-Type: text/html
Content-Length: 8144
Date: Mon, 17 Nov 2025 15:55:38 GMT
```

Apache Tomcat/10.1.4
103.248.14.20
InterCloud ltd
Bangladesh, Dhaka
2025-11-17T15:58:04.228095

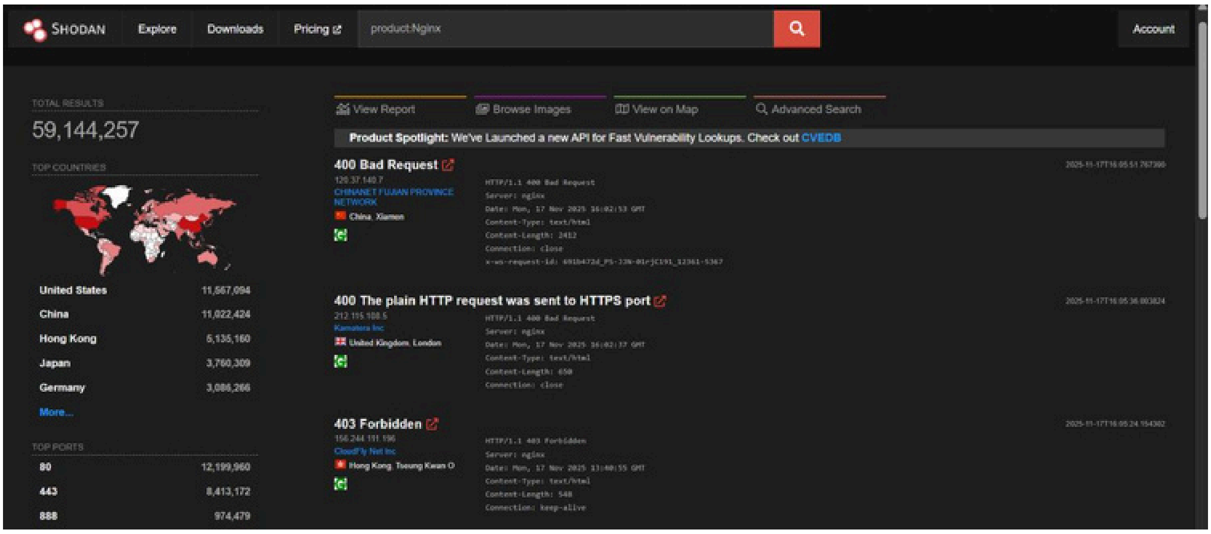
```
HTTP/1.1 200
Content-Type: text/html;charset=UTF-8
Transfer-Encoding: chunked
Date: Mon, 17 Nov 2025 15:57:29 GMT
```

302 Found
217.91.137.241
pd95b89f1.dip0.t-ipconnect.de
Deutsche Telekom AG
Germany, Angermünde
2025-11-17T15:57:53.529469

```
HTTP/1.1 302 Found
Date: Mon, 17 Nov 2025 15:57:30 GMT
Server: Apache/2.4.52 (Ubuntu)
Location: https://217.91.137.241/
Content-Length: 287
Content-Type: text/html; charset=iso-8859-1
```

217.79.254.175
217-79-254-175.static.hvvc.us
Hivelocity LLC
United States, New York City
2025-11-17T15:57:38.891450

```
HTTP/1.1 200 OK
Date: Mon, 17 Nov 2025 15:57:38 GMT
Server: Apache/2.4.41 (Ubuntu)
```



product:Nginx

TOTAL RESULTS

59,144,257

TOP COUNTRIES

United States	11,667,094
China	11,022,424
Hong Kong	5,135,160
Japan	3,760,309
Germany	3,086,266

More...

TOP PORTS

80	12,199,960
443	8,413,172
888	974,479

Product Spotlight: We've Launched a new API for Fast Vulnerability Lookups. Check out CVEDB

400 Bad Request
120.37.140.7
CHINANET FUJIAN PROVINCE NETWORK
China, Xiamen
2025-11-17T16:05:51.767390

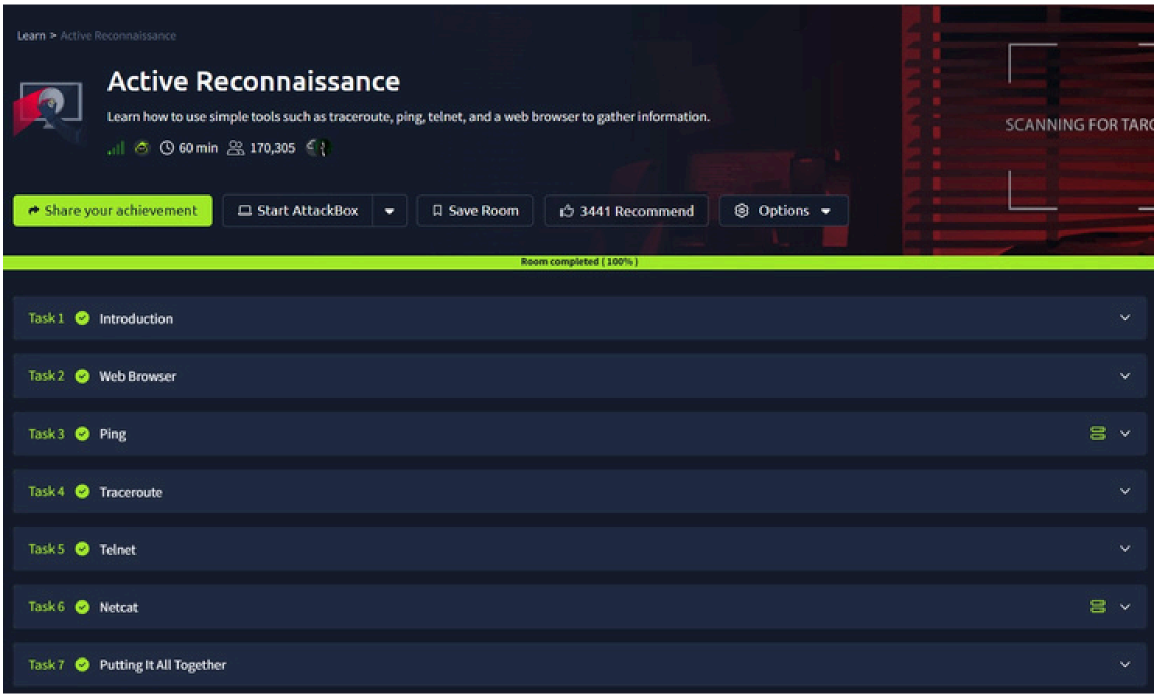
```
HTTP/1.1 400 Bad Request
Server: nginx
Date: Mon, 17 Nov 2025 16:02:53 GMT
Content-Type: text/html
Content-Length: 2412
Connection: close
x-ws-request-id: 691b472d_PS-IJN-01rjC191_12361-5367
```

400 The plain HTTP request was sent to HTTPS port
212.115.108.5
Kamatera Inc
United Kingdom, London
2025-11-17T16:05:36.003824

```
HTTP/1.1 400 Bad Request
Server: nginx
Date: Mon, 17 Nov 2025 16:02:37 GMT
Content-Type: text/html
Content-Length: 650
Connection: close
```

403 Forbidden
156.244.111.196
CloudFly Net Inc
Hong Kong, Tseung Kwan O
2025-11-17T16:05:24.154362

```
HTTP/1.1 403 Forbidden
Server: nginx
Date: Mon, 17 Nov 2025 13:40:55 GMT
Content-Type: text/html
Content-Length: 548
Connection: keep-alive
```



Active Reconnaissance

Learn how to use simple tools such as traceroute, ping, telnet, and a web browser to gather information.

60 min 170,305

Task 1 Introduction

Task 2 Web Browser

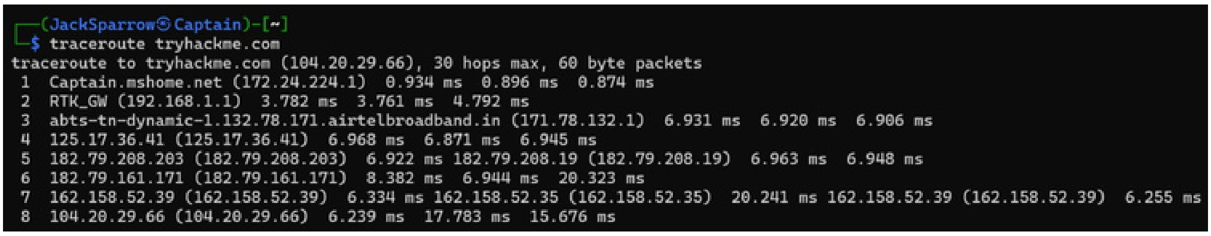
Task 3 Ping

Task 4 Traceroute

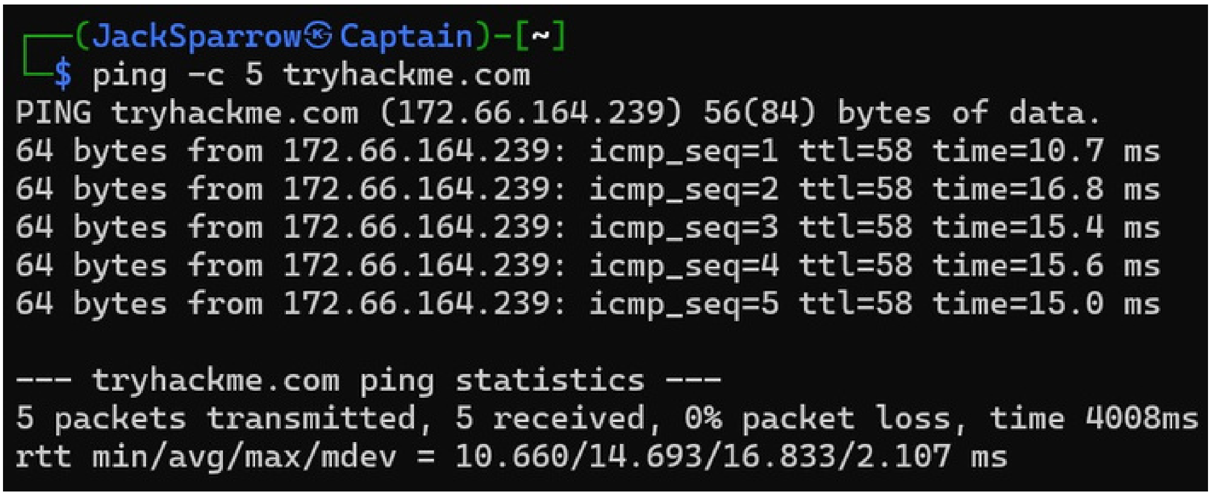
Task 5 Telnet

Task 6 Netcat

Task 7 Putting It All Together



```
┌──(JackSparrow㉿Captain)-[~]
└─$ traceroute tryhackme.com
traceroute to tryhackme.com (104.20.29.66), 30 hops max, 60 byte packets
 1  Captain.mshome.net (172.24.224.1)  0.934 ms  0.896 ms  0.874 ms
 2  RTK_GW (192.168.1.1)  3.782 ms  3.761 ms  4.792 ms
 3  abts-tn-dynamic-1.132.78.171.airtelbroadband.in (171.78.132.1)  6.931 ms  6.920 ms  6.906 ms
 4  125.17.36.41 (125.17.36.41)  6.968 ms  6.871 ms  6.945 ms
 5  182.79.208.203 (182.79.208.203)  6.922 ms 182.79.208.19 (182.79.208.19)  6.963 ms  6.948 ms
 6  182.79.161.171 (182.79.161.171)  8.382 ms  6.944 ms  20.323 ms
 7  162.158.52.39 (162.158.52.39)  6.334 ms 162.158.52.35 (162.158.52.35)  20.241 ms 162.158.52.39 (162.158.52.39)  6.255 ms
 8  104.20.29.66 (104.20.29.66)  6.239 ms  17.783 ms  15.676 ms
```



```
┌──(JackSparrow㉿Captain)-[~]
└─$ ping -c 5 tryhackme.com
PING tryhackme.com (172.66.164.239) 56(84) bytes of data.
64 bytes from 172.66.164.239: icmp_seq=1 ttl=58 time=10.7 ms
64 bytes from 172.66.164.239: icmp_seq=2 ttl=58 time=16.8 ms
64 bytes from 172.66.164.239: icmp_seq=3 ttl=58 time=15.4 ms
64 bytes from 172.66.164.239: icmp_seq=4 ttl=58 time=15.6 ms
64 bytes from 172.66.164.239: icmp_seq=5 ttl=58 time=15.0 ms

--- tryhackme.com ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4008ms
rtt min/avg/max/mdev = 10.660/14.693/16.833/2.107 ms
```

RESULT:

Thus, the passive and active reconnaissance has been performed successfully in TryHackMe platform.