EX NO : 8 PERFORM ROOTKIT DETECTION AND REMOVAL USING RKHUNTER Tool   **Date:6-4-25**

231901017   Karthik R

AIM:

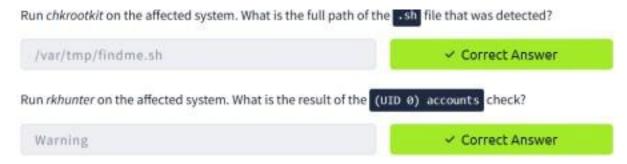Perform real-time file system analysis on a Linux system to identify an attacker's

artefacts. TASK 2 : INVESTIGATION SETUP

After updating the `PATH` and `LD_LIBRARY_PATH` environment variables, run the command `check-env`.
What is the flag that is returned in the output?

THM[5514ec4f1ce82f63867806d3cd95dbd8]   ✓ Correct Answer   ♡ Hint

TASK 3 : FILES,PERMISSION AND TIMESTAMPS

To practice your skills with the `find` command, locate all the files that the user **bob** created in the past
1 minute. Once found, review its contents. What is the flag you receive?

THM[0b1313afd2136ca0faafb2daa2b430f3]   ✓ Correct Answer   ♡ Hint

Extract the metadata from the `reverse.elf` file. What is the file's MIME type?

application/octet-stream   ✓ Correct Answer

Run the `stat` command against the `/etc/hosts` file on the compromised web server. What is the full
Modify Timestamp (mtime) value?

2020-10-26 21:10:44.000000000 +0000   ✓ Correct Answer

TASK 4 : USERS AND GROUPS

Investigate the user accounts on the system. What is the name of the backdoor account that the attacker created?

b4ckd00r3d   ✓ Correct Answer   ♀ Hint

What is the name of the group with the group ID of **46**?

plugdev   ✓ Correct Answer

View the `/etc/sudoers` file on the compromised system. What is the full path of the binary that Jane can run as sudo?

/usr/bin/pstree   ✓ Correct Answer

TASK 5 : USER DIRECTORIES AND FILES

View Jane's `.bash_history` file. What flag do you see in the output?

THM{f38279ab9c6af1215815e5f7bbad891b}   ✓ Correct Answer

What is the hidden flag in Bob's home directory?

THM{6ed90e00e4fb7945bead8cd59e9fcd7f}   ✓ Correct Answer

Run the `stat` command on Jane's `authorized_keys` file. What is the full timestamp of the most recent modification?

2024-02-13 00:34:16.005897449 +0000   ✓ Correct Answer

TASK 6 : BINARIES AND EXECUTABLES

Run the `debsums` utility on the compromised host to check only configuration files. Which file came back as altered?

/etc/sudoers   ✓ Correct Answer

What is the `md5sum` of the binary that the attacker created to escalate privileges to root?

7063c3930affe123baecd3b340f1ad2c   ✓ Correct Answer

TASK 7 : ROOTKITS

Run *chkrootkit* on the affected system. What is the full path of the `.sh` file that was detected?

| /var/tmp/findme.sh | ✓ Correct Answer |

Run *rkhunter* on the affected system. What is the result of the `(UID 0) accounts` check?

| Warning | ✓ Correct Answer |

CONCLUSION :

Rootkit detection and removal using rkhunter tool is successfully performed.