

## Intro to Log Analysis

EX-NO:14

### AIM:

An intro to log analysis, best practices, and essential tools for effective detection and response.

### PROCEDURE:

- Task 1 Introduction
- Task 2 Log Analysis Basics
- Task 3 Investigation Theory
- Task 4 Detection Engineering
- Task 5 Automated vs. Manual Analysis
- Task 6 Log Analysis Tools: Command Line
- Task 7 Log Analysis Tools: Regular Expressions
- Task 8 Log Analysis Tools: CyberChef
- Task 9 Log Analysis Tools: Yara and Sigma
- Task 10 Conclusion

#### Task 1 Introduction :

Answer the questions below

I'm ready to proceed!

No answer needed

✓ Correct Answer

#### Task 2 Log Analysis Basics :

Answer the questions below

I understand the basics of logs and I'm ready to proceed!

No answer needed

✓ Correct Answer

#### Task 3 Investigation Theory :

Answer the questions below

What's the term for a consolidated chronological view of logged events from diverse sources, often used in log analysis and digital forensics?

Super Timeline

✓ Correct Answer

Which threat intelligence indicator would `5b31f93c09ad1d065c0491b764d04933` and `763f8bdbc98d105a8e82f36157e98bbe` be classified as?

File Hashes

✓ Correct Answer

#### Task 4 Detection Engineering :

## Answer the questions below

What is the default file path to view logs regarding HTTP requests on an Nginx server?

✓ Correct Answer

A log entry containing `%2E%2E%2F%2E%2Fproc%2Fself%2Fenviron` was identified. What kind of attack might this infer?

✓ Correct Answer

## Task 5 Automated vs. Manual Analysis :

## Answer the questions below

A log file is processed by a tool which returns an output. What form of analysis is this?

✓ Correct Answer

An analyst opens a log file and searches for events. What form of analysis is this?

✓ Correct Answer

## Task 6 Log Analysis Tools: Command Line :

## Answer the questions below

Use `cut` on the `apache.log` file to return only the URLs. What is the flag that is returned in one of the unique entries?

✓ Correct Answer

🔍 Hint

In the `apache.log` file, how many total HTTP 200 responses were logged?

✓ Correct Answer

🔍 Hint

In the `apache.log` file, which IP address generated the most traffic?

✓ Correct Answer

🔍 Hint

What is the complete timestamp of the entry where `110.122.65.76` accessed `/login.php`?

✓ Correct Answer

🔍 Hint

## Task 7 Log Analysis Tools: Regular Expressions :

## Answer the questions below

How would you modify the original `grep` pattern above to match blog posts with an ID between 20-29?

✓ Correct Answer

🔍 Hint

What is the name of the filter plugin used in Logstash to parse unstructured log data?

✓ Correct Answer

## Task 8 Log Analysis Tools: CyberChef :

## Answer the questions below

Locate the "loganalysis.zip" file under `/root/Rooms/introloganalysis/task8` and extract the contents.

✓ Correct Answer

Upload the log file named "access.log" to CyberChef. Use regex to list all of the IP addresses. What is the full IP address beginning in 212?

✓ Correct Answer

Using the same log file from Question #2, a request was made that is encoded in base64. What is the decoded value?

✓ Correct Answer

Using CyberChef, decode the file named "encodedflag.txt" and use regex to extract by MAC address. What is the extracted value?

✓ Correct Answer

## Task 9 Log Analysis Tools: Yara and Sigma :

## Answer the questions below

What languages does Sigma use?

✓ Correct Answer

What keyword is used to denote the "title" of a Sigma rule?

✓ Correct Answer

What keyword is used to denote the "name" of a rule in YARA?

✓ Correct Answer

## Task 10 Conclusion :

## Answer the questions below

Click and continue learning!

✓ Correct Answer

## RESULT:

Thus the Intro To Log Analysis is completed using tryhackme platform.