Shell Script to Monitor logs

ABOUT:

Monitoring logs is crucial for identifying errors, security threats, and performance issues in applications and servers. A **Shell script** can automate this process by continuously checking log files for specific keywords, errors, or anomalies and sending alerts when necessary.

By implementing a log monitoring script, system administrators and developers can:

- Detect issues in real time
- Improve system reliability and security
- Reduce manual effort in log analysis

This guide will provide a **Shell script to monitor logs**, filter specific patterns, and trigger alerts when critical events occur.

SIGNIFICANCE:

Real-Time Issue Detection – Helps identify system errors, crashes, or security threats instantly.

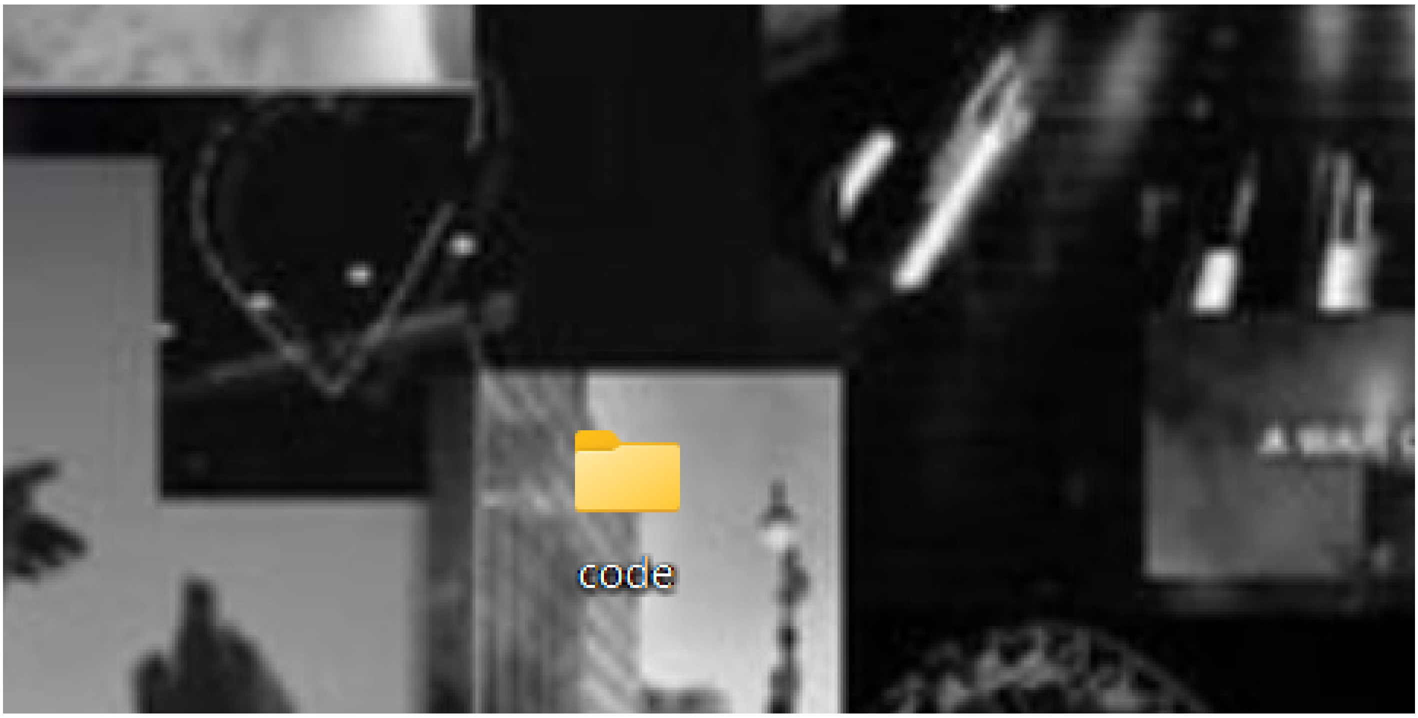
Automated Alerting – Sends notifications when critical events or anomalies are found in logs.

Improved System Reliability – Ensures quick response to issues, reducing downtime and failures.

Reduced Manual Effort – Automates log analysis, saving time for system administrators and developers.

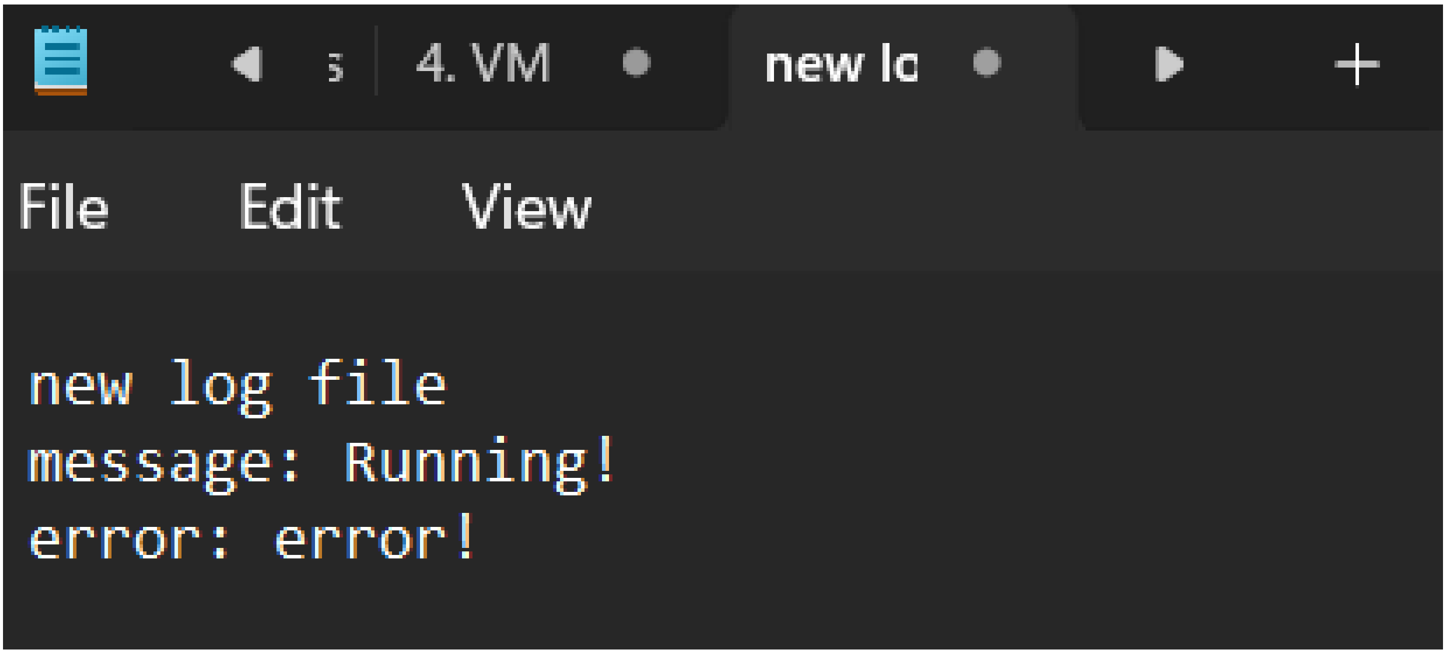
STEP 1:

Create a new folder to have your logs



STEP 2:

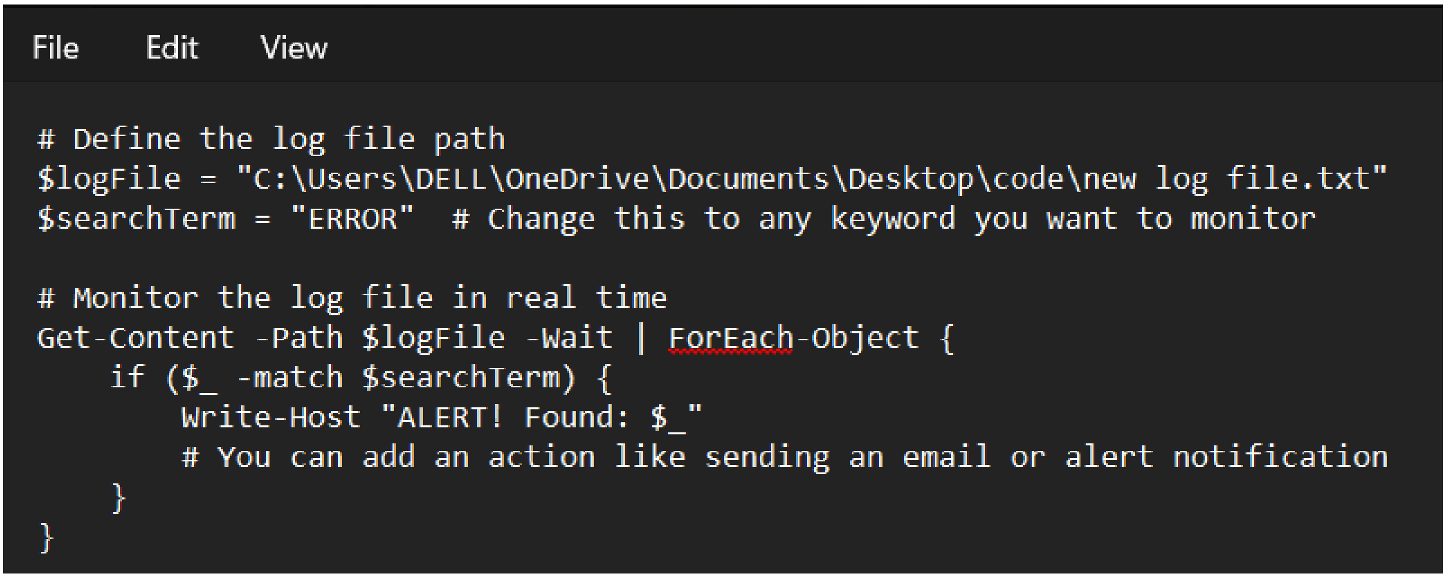
Write the following and store it inside the folder created



```
new log file
message: Running!
error: error!
```

STEP 3:

Open **Notepad** and paste the following PowerShell script:



```
# Define the log file path
$logFile = "C:\Users\DELL\OneDrive\Documents\Desktop\code\new log file.txt"
$searchTerm = "ERROR"  # Change this to any keyword you want to monitor

# Monitor the log file in real time
Get-Content -Path $logFile -Wait | ForEach-Object {
    if ($_ -match $searchTerm) {
        Write-Host "ALERT! Found: $_"
        # You can add an action like sending an email or alert notification
    }
}
```

copy the file path of your folder and paste it in $logfile

Save the file as **monitor.ps1 and save** it under the same folder you've created

STEP 4:

Go to windows powershell and click on run as Administrator.

Type the following to run the shell script

Set-ExecutionPolicy -Scope CurrentUser -ExecutionPolicy RemoteSigned

Type Y

STEP 5:

1. Type cd and copy the path of your folder and click on enter.
2. To run the script type - .\ **monitor.ps1 , click Enter**

STEP 6:

You will able to see the sentence type in your notepad

STEP 7:

Change the sentence in your notepad and try again . You will the the updated changes

Which means your logs are being monitored regularly