

TASK 4

Write a script 'watch_dir.sh' that watches '/home/studentuser/projectX/logs' for new '.txt' files.

When a new file is created, echo its name with a timestamp to 'log_monitor.txt'.

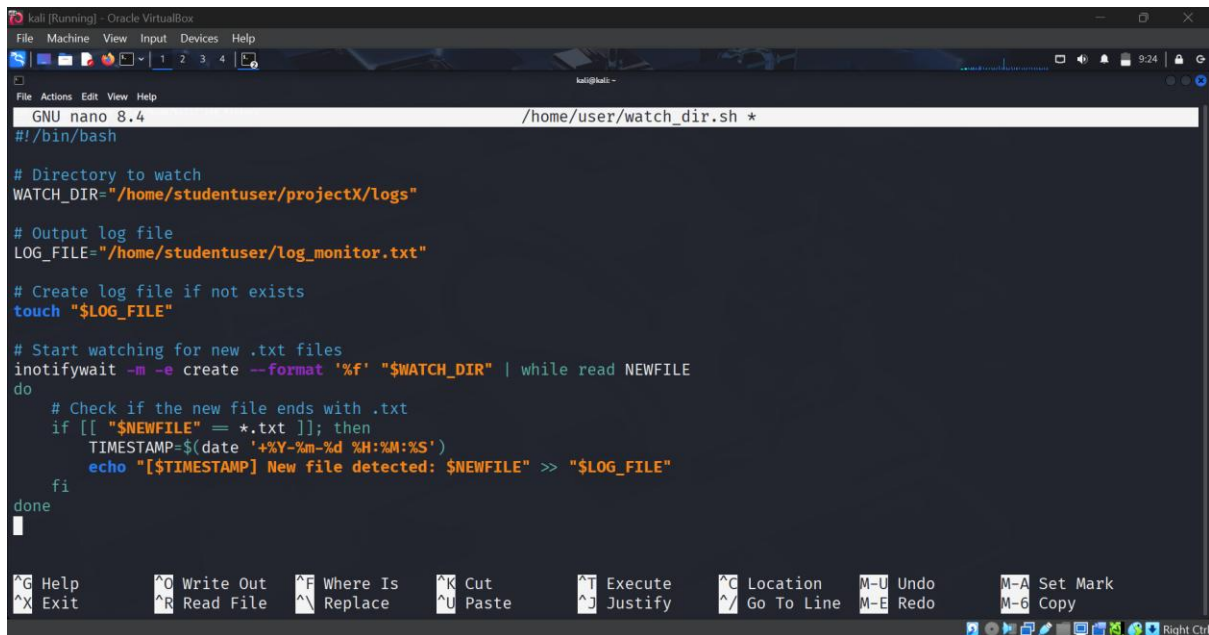
Step 1 :

Install inotify tools

```
(kali㉿kali)-[~]
└─$ sudo apt install inotify-tools
[sudo] password for kali:
inotify-tools is already the newest version (4.23.9.0-2+b1).
Summary:
  Upgrading: 0, Installing: 0, Removing: 0, Not Upgrading: 432
(kali㉿kali)-[~]
└─$ sudo nano /home/user/watch_dir.sh
```

Step 2 :

Paste the code

A screenshot of a nano editor window titled 'GNU nano 8.4 /home/user/watch_dir.sh *'. The window shows the script code for watching a directory for new .txt files. The code includes comments for directory, log file, and the inotifywait command. It also includes a loop to check if the new file ends with .txt and echo the timestamp and filename to the log file. The bottom of the window shows a menu with various shortcuts like ^G Help, ^O Write Out, ^F Where Is, ^R Cut, ^T Execute, ^C Location, M-U Undo, M-A Set Mark, ^X Exit, ^R Read File, ^N Replace, ^U Paste, ^J Justify, ^_ Go To Line, M-E Redo, and M-6 Copy. The system tray at the bottom right shows the date and time as 9:24.

```
GNU nano 8.4 /home/user/watch_dir.sh *
#!/bin/bash

# Directory to watch
WATCH_DIR="/home/studentuser/projectX/logs"

# Output log file
LOG_FILE="/home/studentuser/log_monitor.txt"

# Create log file if not exists
touch "$LOG_FILE"

# Start watching for new .txt files
inotifywait -m -e create --format '%f' "$WATCH_DIR" | while read NEWFILE
do
    # Check if the new file ends with .txt
    if [[ "$NEWFILE" == *.txt ]]; then
        TIMESTAMP=$(date '+%Y-%m-%d %H:%M:%S')
        echo "[${TIMESTAMP}] New file detected: $NEWFILE" >> "$LOG_FILE"
    fi
done
```

Step 3 :

Run the script

```
(kali㉿kali)-[~]  
$ sudo -u user /home/user/watch dir.sh
```

Step 4 :

Verify the log File

```
(kali㉿kali)-[~]  
$ sudo cat /home/user/projectx/log_monitor.txt
```

Step 5 :

The final Output : [2025-07-28 20:45:12] New File detected: test1.txt