

## Module 4 Assignment Solution

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arjjun-g@arjjun-g-VMware-Virtual-Platform: ~/assignment4
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment4$ cat extract.sh
#!/bin/bash

INPUT_FILE="input.txt"
OUTPUT_FILE="output.txt"

# Check input file
if [ ! -f "$INPUT_FILE" ]; then
    echo "Error: input.txt not found"
    exit 1
fi

# Clear output file
> "$OUTPUT_FILE"

# Read file line by line
while IFS= read -r line; do

    # Trim leading and trailing whitespace
    trimmed=$(echo "$line" | sed 's/^[[:space:]]*//;s/[[:space:]]*$//')

    # Match ONLY exact keys (not sub-keys)
    if echo "$trimmed" | grep -Eq '"(frame\.time|wlan\.fc\.type|wlan\.fc\.subtype)"[[:space:]]*:'; then
        echo "$trimmed" >> "$OUTPUT_FILE"
    fi

done < "$INPUT_FILE"

echo "Extraction completed → output.txt"

arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment4$
```

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arjjun-g@arjjun-g-VMware-Virtual-Platform: ~/assignment4
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment4$ nano extract.sh
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment4$ ./extract.sh
^C
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment4$ ls
extract.sh  input.txt  output.txt
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment4$ cat output.txt | head -n 5
"frame.time": "Dec 31, 2024 12:50:25.890970000 India Standard Time",
"wlan.fc.type": "0",
"wlan.fc.subtype": "8",
"frame.time": "Dec 31, 2024 12:50:25.892357000 India Standard Time",
"wlan.fc.type": "0",
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment4$ ls
extract.sh  input.txt  output.txt
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment4$ ls -l
total 158988
-rwxrwxr-x 1 arjjun-g arjjun-g      630 Feb  3 18:48 extract.sh
-rwxrw-rw- 1 arjjun-g arjjun-g 162538952 Feb  3 11:26 input.txt
-rw-rw-r-- 1 arjjun-g arjjun-g   252991 Feb  3 20:56 output.txt
```

This Assignment is done by Arjjun G