

## Module – 4

### Assignment Submission – embedUR Linux Course

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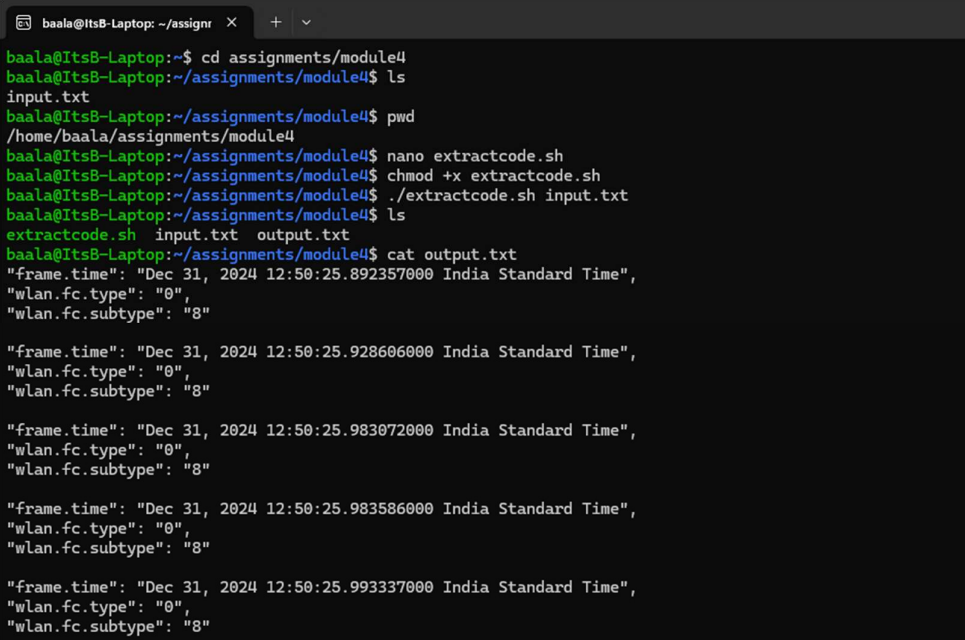
#### Question – 1

For the attached file, write a bash script which should take the file as input and have to go through it line by line and need to generate an output file (say output.txt) with listings of following parameters fetched from the input file.

Params expected to be fetched from input.txt file : "frame.time", "wlan.fc.type", "wlan.fc.subtype"

**Sample output expected in output.txt:**

```
"frame.time": "Nov 14, 2024 11:44:48.219200000 India Standard Time",
"wlan.fc.type": "1",
"wlan.fc.subtype": "9"
"frame.time": "Nov 14, 2024 11:44:48.219208000 India Standard Time",
"wlan.fc.type": "0",
"wlan.fc.subtype": "1",
```



```
baala@ItsB-Laptop: ~/assignn
baala@ItsB-Laptop:~$ cd assignments/module4
baala@ItsB-Laptop:~/assignments/module4$ ls
input.txt
baala@ItsB-Laptop:~/assignments/module4$ pwd
/home/baala/assignments/module4
baala@ItsB-Laptop:~/assignments/module4$ nano extractcode.sh
baala@ItsB-Laptop:~/assignments/module4$ chmod +x extractcode.sh
baala@ItsB-Laptop:~/assignments/module4$ ./extractcode.sh input.txt
baala@ItsB-Laptop:~/assignments/module4$ ls
extractcode.sh  input.txt  output.txt
baala@ItsB-Laptop:~/assignments/module4$ cat output.txt
"frame.time": "Dec 31, 2024 12:50:25.892357000 India Standard Time",
"wlan.fc.type": "0",
"wlan.fc.subtype": "8"

"frame.time": "Dec 31, 2024 12:50:25.928606000 India Standard Time",
"wlan.fc.type": "0",
"wlan.fc.subtype": "8"

"frame.time": "Dec 31, 2024 12:50:25.983072000 India Standard Time",
"wlan.fc.type": "0",
"wlan.fc.subtype": "8"

"frame.time": "Dec 31, 2024 12:50:25.983586000 India Standard Time",
"wlan.fc.type": "0",
"wlan.fc.subtype": "8"

"frame.time": "Dec 31, 2024 12:50:25.993337000 India Standard Time",
"wlan.fc.type": "0",
"wlan.fc.subtype": "8"
```

## Code:

```
#!/bin/bash

INPUT_FILE="$1"

OUTPUT_FILE="output.txt"

> "$OUTPUT_FILE"

frame_time=""

fc_type=""

fc_subtype=""

while IFS= read -r line
do
    if [[ $line == *"frame.time"* ]]; then
        frame_time=$(echo "$line" | sed -n 's/.*"frame.time":[:space:]]*"(.*)".*/\1/p')
    fi

    if [[ $line == *"wlan.fc.type"* ]]; then
        fc_type=$(echo "$line" | sed -n 's/.*"wlan.fc.type":[:space:]]*"(.*)".*/\1/p')
    fi

    if [[ $line == *"wlan.fc.subtype"* ]]; then
        fc_subtype=$(echo "$line" | sed -n 's/.*"wlan.fc.subtype":[:space:]]*"(.*)".*/\1/p')
    fi

    if [[ -n $frame_time && -n $fc_type && -n $fc_subtype ]]; then
        {
            echo "\"frame.time\": \"$frame_time\","
            echo "\"wlan.fc.type\": \"$fc_type\","
            echo "\"wlan.fc.subtype\": \"$fc_subtype\""
            echo
        } >> "$OUTPUT_FILE"

        # Reset for next frame
        frame_time=""
        fc_type=""
        fc_subtype=""
    fi
done < "$INPUT_FILE"
```