

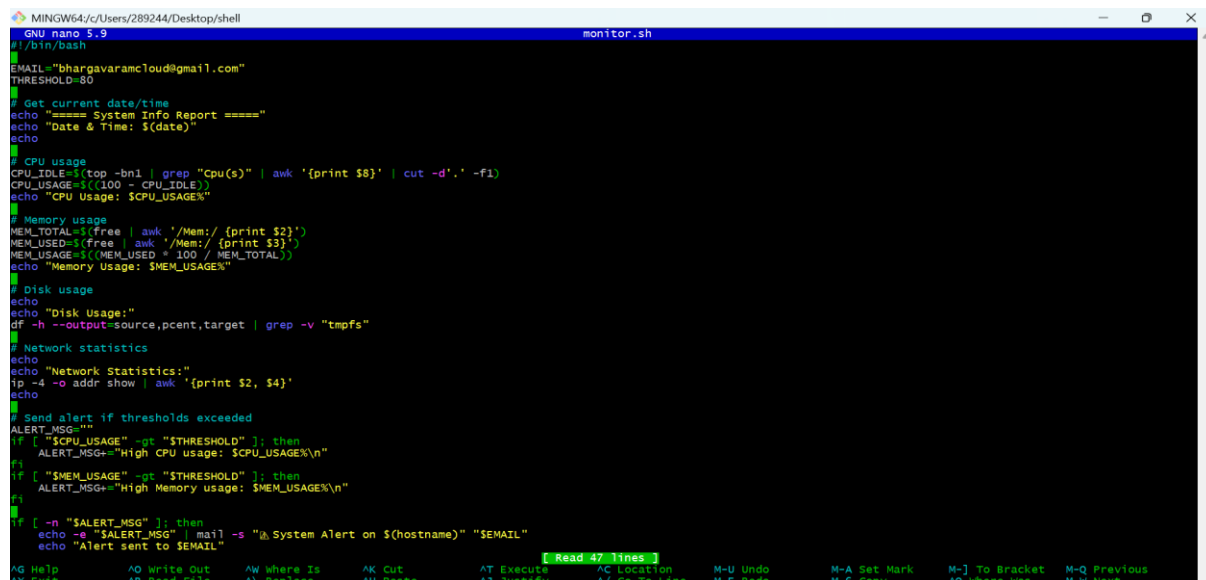
Question 3

```
USTR+289244@7RYKOF3 MINGW64 ~/Desktop/shell
$ sudo apt update
```

```
USTR+289244@7RYKOF3 MINGW64 ~/Desktop/shell
$ sudo apt mailutils
```

```
USTR+289244@7RYKOF3 MINGW64 ~/Desktop/shell
$ sudo nano monitor.sh
```

```
USTR+289244@7RYKOF3 MINGW64 ~/Desktop/shell
$ sudo chmod +x monitor.sh
```



```
MINGW64/c/Users/289244/Desktop/shell
GNU nano 5.9 monitor.sh
#!/bin/bash
EMAIL="bhargavaramcloud@gmail.com"
THRESHOLD=80

# Get current date/time
echo "==== System Info Report ====="
echo "Date & Time: $(date)"
echo

# CPU usage
CPU_IDLE=$(top -bn1 | grep "Cpu(s)" | awk '{print $8}' | cut -d'.' -f1)
CPU_USAGE=$((100 - CPU_IDLE))
echo "CPU Usage: $CPU_USAGE%"

# Memory usage
MEM_TOTAL=$(free | awk '/Mem:/ {print $2}')
MEM_USED=$(free | awk '/Mem:/ {print $3}')
MEM_USAGE=$((MEM_USED * 100 / MEM_TOTAL))
echo "Memory Usage: $MEM_USAGE%"

# Disk usage
echo
echo "Disk Usage:"
df -h --output=source,pcent,target | grep -v "tmpfs"

# Network statistics
echo
echo "Network Statistics:"
ip -4 -o addr show | awk '{print $2, $4}'
echo

# Send alert if thresholds exceeded
ALERT_MSG=""
if [ "$CPU_USAGE" -gt "$THRESHOLD" ]; then
    ALERT_MSG+="High CPU usage: $CPU_USAGE%\n"
fi
if [ "$MEM_USAGE" -gt "$THRESHOLD" ]; then
    ALERT_MSG+="High Memory usage: $MEM_USAGE%\n"
fi

if [ -n "$ALERT_MSG" ]; then
    echo -e "$ALERT_MSG" | mail -s "[a] System Alert on $(hostname)" "$EMAIL"
    echo "Alert sent to $EMAIL"
fi

AG Help          AO Write Out    AW where Is     AK Cut          AT Execute      AC Location     M-U Undo        M-A Set Mark    M-] To Bracket  M-Q Previous
OX Exit          AR Read File    AY Replace      AL Paste        AJ Justify      /Z Go To Line   M-E Redo        M-F Copy        M-; Where Was   M-W Next
```

```
USTR+289244@7RYKOF3 MINGW64 ~/Desktop/shell
$ ./monitor.sh
```

```
==== System Info Report =====
Date & Time: Sat May 3 11:03:52 AM IST 2025

CPU Usage: 46%
Memory Usage: 45%

Disk Usage:
Filesystem      Use% Mounted on
/dev/sda3        12% /
/dev/sda2         2% /boot/efi
/dev/sr0         100% /media/master/Ubuntu 22.04.5 LTS amd64

Network Statistics:
lo 127.0.0.1/8
ens33 192.168.153.128/24
docker0 172.17.0.1/16
tunl0 172.16.253.128/32

System is operating within normal limits.
master@master-vm:~/Desktop$
```

