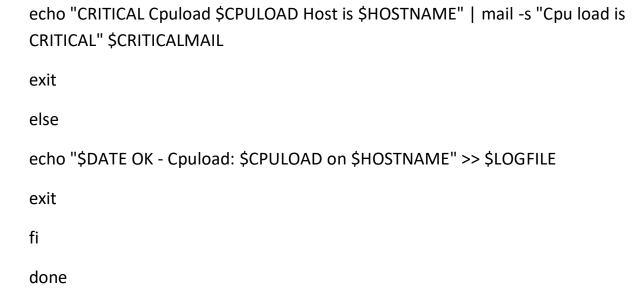
Shell script for monitoring the slave machine for Cpu utilization and send alerts to master if it reaches 80%

Bash script to monitor CPU, memory, and disk usage on multiple hosts and sends an email notification if the CPU load exceeds a critical threshold.

Script:

```
#!/bin/bash
CRITICAL=80
CRITICALMAIL="aniket@ip-172-31-60-191.ec2.internal" ###mail of master
LOGFILE=/home/aniket/cpu_util-`date +%h%d%y`.log
for i in `cat /home/aniket/hostlist`;
do
HOSTNAME=$(hostname)
DATE=$(date "+%Y-%m-%d %H:%M:%S")
CPULOAD=$(top -b -n 1 -d1 | grep "Cpu(s)" | awk '{print $2}' | awk -F. '{print $1}')
MEMUSAGE=$(free | grep Mem | awk '{print $3/$2 * 100.0}')
DISKUSAGE=$(df -P | column -t | awk '{print $5}' | tail -n 1 | sed 's/%//g')
                   Date&Time,
                                  CPUi(%),Mem(%),Disk(%)">> $LOGFILE
echo "Hostname,
echo "$HOSTNAME, $DATE, $CPULOAD, $MEMUSAGE, $DISKUSAGE">> $LOGFILE
if [ "$CPULOAD" -ge "$CRITICAL" ]; then
echo "$DATE CRITICAL - $CPULOAD on host $HOSTNAME" >> $LOGFILE
```



This is a bash script that monitors CPU, memory, and disk usage on multiple hosts and sends an email notification if the CPU load exceeds a critical threshold.

Here's a breakdown of what the script does:

- 1. It sets the critical threshold for CPU usage (`CRITICAL=80`) and the email address to receive notifications (`CRITICALMAIL="aniket@ip-172-31-60-191.ec2.internal"`).
- It defines a logfile path using the current date
 (`LOGFILE=/home/aniket/cpu_util-`date +%h%d%y`.log`).
- 3. It loops through a list of hosts stored in the file 'home/aniket/hostlist'.
- 4. Inside the loop, it gets the hostname of the current machine (`HOSTNAME=\$(hostname)`), the current date and time (`DATE=\$(date "+%Y-%m-%d %H:%M:%S")`), and the CPU load percentage (`CPULOAD=\$(top -b -n 1 d1 | grep "Cpu(s)" |awk '{print \$2}' |awk -F. '{print \$1}')`).
- 5. It calculates the memory usage percentage by dividing used memory by total memory (`MEMUSAGE=\$(free | grep Mem | awk '{print \$3/\$2 * 100.0}')`).

- 6. It calculates the disk usage percentage by retrieving the usage from the last line of the `df -P` command's output (`DISKUSAGE=\$(df -P | column -t | awk '{print \$5}' | tail -n 1 | sed 's/%//g')`).
- 7. It appends the collected data to the logfile in the format: "Hostname, Date&Time, CPUi(%), Mem(%), Disk(%)".
- 8. If the CPU load exceeds the critical threshold ('if ["\$CPULOAD" -ge "\$CRITICAL"]; then'), it appends a critical notification message to the logfile and sends an email notification with the subject "Cpu load is CRITICAL" to the specified email address ('echo "CRITICAL Cpuload \$CPULOAD Host is \$HOSTNAME" | mail -s "Cpu load is CRITICAL" \$CRITICALMAIL'), and then exits the script.
- 9. If the CPU load is below the critical threshold, it appends an "**OK**" message to the logfile and exits the script.

Please note that this script assumes the necessary commands ('top', 'free', 'df', 'mail') are available on the system running the script, and the user running the script has appropriate permissions to access the necessary files and execute the commands.