

# Task 3: Mini Server Monitor Script

## 1. Create the script file

```
nano monitor.sh
```

## 2. Paste the following into the nano editor, then save:

```
#!/bin/bash
```

```
LOGFILE="/var/log/monitor.log"
```

```
echo "----- $(date) -----" >> $LOGFILE
```

```
# Check if nginx is running
```

```
if pgrep nginx > /dev/null; then
```

```
    echo "Nginx is running." >> $LOGFILE
```

```
else
```

```
    echo "Nginx is not running. Starting nginx..." >> $LOGFILE
```

```
    sudo systemctl start nginx
```

```
    echo "Nginx started." >> $LOGFILE
```

```
fi
```

```
# Memory usage
```

```
echo "Memory Usage:" >> $LOGFILE
```

```
free -h >> $LOGFILE
```

```
# CPU load
```

```
echo "CPU Load:" >> $LOGFILE
```

```
uptime >> $LOGFILE
```

```
# Disk usage
```

```
echo "Disk Usage:" >> $LOGFILE
```

```
df -h >> $LOGFILE
```

```
echo -e "\n" >> $LOGFILE
```

## 3. Make the script executable

```
chmod +x monitor.sh
```

## 4. Move the script to a suitable location (optional)

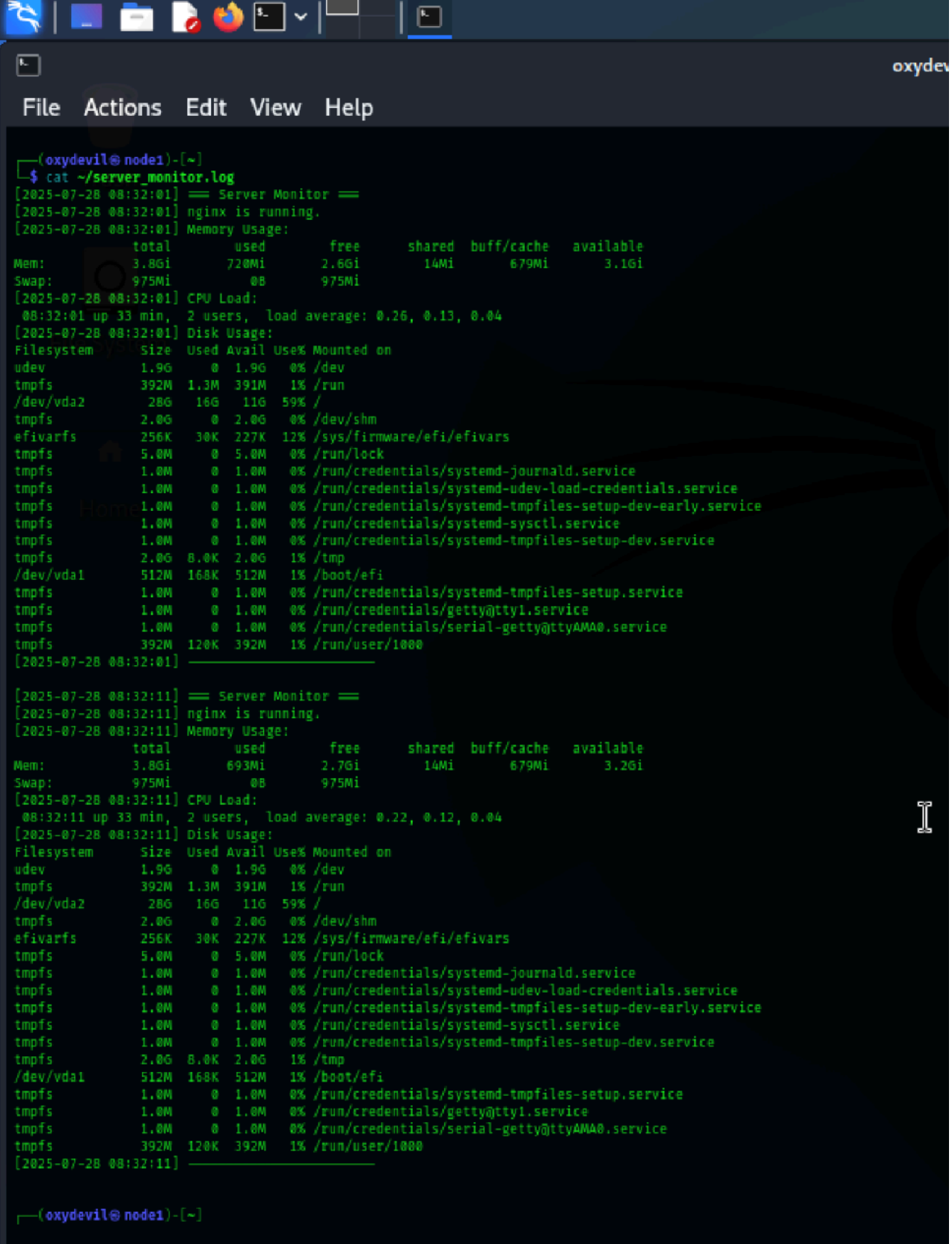
```
sudo mv monitor.sh /usr/local/bin/monitor.sh
```

## 5. Open the crontab

```
crontab -e
```

## 6. Add the following line at the end to schedule the script every 5 minutes:

\* /5 \* \* \* \* /usr/local/bin/monitor.sh



```
(oxydevil@ node1) - [~]
$ cat ~/server_monitor.log
[2025-07-28 08:32:01] == Server Monitor ==
[2025-07-28 08:32:01] nginx is running.
[2025-07-28 08:32:01] Memory Usage:
Mem:      total      used      free      shared  buff/cache  available
Swap:    975Mi       0B      975Mi
[2025-07-28 08:32:01] CPU Load:
08:32:01 up 33 min,  2 users,  load average: 0.26, 0.13, 0.04
[2025-07-28 08:32:01] Disk Usage:
Filesystem      Size  Used Avail Use% Mounted on
udev            1.9G   0 1.9G   0% /dev
tmpfs           392M  1.3M 391M   1% /run
/dev/vda2       28G   16G  11G  59% /
tmpfs           2.0G   0 2.0G   0% /dev/shm
efivarfs        256K  30K 227K  12% /sys/firmware/efi/efivars
tmpfs           5.0M   0 5.0M   0% /run/lock
tmpfs           1.0M   0 1.0M   0% /run/credentials/systemd-journald.service
tmpfs           1.0M   0 1.0M   0% /run/credentials/systemd-udev-load-credentials.service
tmpfs           1.0M   0 1.0M   0% /run/credentials/systemd-tmpfiles-setup-dev-early.service
tmpfs           1.0M   0 1.0M   0% /run/credentials/systemd-sysctl.service
tmpfs           1.0M   0 1.0M   0% /run/credentials/systemd-tmpfiles-setup-dev.service
tmpfs           2.0G  8.0K 2.0G   1% /tmp
/dev/vda1       512M  168K 512M   1% /boot/efi
tmpfs           1.0M   0 1.0M   0% /run/credentials/systemd-tmpfiles-setup.service
tmpfs           1.0M   0 1.0M   0% /run/credentials/getty@tty1.service
tmpfs           1.0M   0 1.0M   0% /run/credentials/serial-getty@ttyAMA0.service
tmpfs           392M  120K 392M   1% /run/user/1000
[2025-07-28 08:32:01]

[2025-07-28 08:32:11] == Server Monitor ==
[2025-07-28 08:32:11] nginx is running.
[2025-07-28 08:32:11] Memory Usage:
Mem:      total      used      free      shared  buff/cache  available
Swap:    975Mi       0B      975Mi
[2025-07-28 08:32:11] CPU Load:
08:32:11 up 33 min,  2 users,  load average: 0.22, 0.12, 0.04
[2025-07-28 08:32:11] Disk Usage:
Filesystem      Size  Used Avail Use% Mounted on
udev            1.9G   0 1.9G   0% /dev
tmpfs           392M  1.3M 391M   1% /run
/dev/vda2       28G   16G  11G  59% /
tmpfs           2.0G   0 2.0G   0% /dev/shm
efivarfs        256K  30K 227K  12% /sys/firmware/efi/efivars
tmpfs           5.0M   0 5.0M   0% /run/lock
tmpfs           1.0M   0 1.0M   0% /run/credentials/systemd-journald.service
tmpfs           1.0M   0 1.0M   0% /run/credentials/systemd-udev-load-credentials.service
tmpfs           1.0M   0 1.0M   0% /run/credentials/systemd-tmpfiles-setup-dev-early.service
tmpfs           1.0M   0 1.0M   0% /run/credentials/systemd-sysctl.service
tmpfs           1.0M   0 1.0M   0% /run/credentials/systemd-tmpfiles-setup-dev.service
tmpfs           2.0G  8.0K 2.0G   1% /tmp
/dev/vda1       512M  168K 512M   1% /boot/efi
tmpfs           1.0M   0 1.0M   0% /run/credentials/systemd-tmpfiles-setup.service
tmpfs           1.0M   0 1.0M   0% /run/credentials/getty@tty1.service
tmpfs           1.0M   0 1.0M   0% /run/credentials/serial-getty@ttyAMA0.service
tmpfs           392M  120K 392M   1% /run/user/1000
[2025-07-28 08:32:11]

(oxydevil@ node1) - [~]
```