# Server Monitor Script Project Brief

## Scenario

You work for a development firm and your team wants to receive updates on the server load on a daily basis.

You are asked to create a script that will monitor our server's performance and log key information into a file.

You will then pull this file to your laptop on a daily basis so you always have key metrics to hand.

## Your Tasks

### Task 1: Create the Script

**Step 1:**

Firstly we need to create a script called `performance_checker.sh` that will check and log specific performance details.

Your first task is to use the `date` command to append the current timestamp to a `performance.log` file on the server.

**Step 2:**

The second command we want to run is to test if our internet connection is connected:

```
ping -c 1 google.com &> /dev/null

if [ "$?" -eq 0 ]; then
  echo "Internet: Connected" >> performance.log
else
  echo "Internet: Disconnected" >> performance.log
fi
```

**Step 3:**

The third command we want to run is to check our RAM utilisation using the `free` command:

```
echo "RAM Usage :" >> performance.log
```

```
free -h | grep "Mem" >> performance.log
```

**Step 4:**

The fourth command we want to run is to check our swap usage:

```
echo "Swap Usage :" >> performance.log
free -h | grep "Swap" >> performance.log
```

**Step 5:**

The final command we want to run is to check our disk usage using the dh  command:

```
echo "Disk Usage :" >> performance.log
df -h >> performance.log
echo ""
```

**Step 6:**

Give your `performance_checker.sh` script execution permissions.

# Task 2: Automate the script on the remote server

This script needs to be setup on `cron` on the remote server to run every hour.

Create a crontab entry that will do this.

*Hint:* You can check that your expression is correct using [crontab.guru](crontab.guru)

# Task 3: Automate the downloading of the data to your local laptop.

Set up a `cron` entry to execute the `scp` command on a daily basis, so that a copy of the server's `performance.log` file is downloaded to your laptop every hour, at 15 minutes past the hour (e.g. 12:15, 2:15, etc).

This will ensure that there is enough time for the script on the server to run and update the log, before we copy the log down to our local machine.