Assignment3

1.OS information

```
#!/bin/bash

echo "Operating System: $(uname -o)"
echo "Kernel Version: $(uname -r)"
echo "CPU Info:"
lscpu | grep "Model name"
echo "Available Memory:"
free -h | grep "Mem:"
```

```
root@fedora:/home/abel/Desktop# ./os.sh
Operating System: GNU/Linux
Kernel Version: 6.8.5-301.fc40.x86_64
CPU Info:
Model name:                     12th Gen Intel(R) Core(TM) i5-12500H
BIOS Model name:                12th Gen Intel(R) Core(TM) i5-12500H  CPU
@ 3.1GHz
Available Memory:
Mem:            1.9Gi       952Mi       613Mi       1.7Mi       511Mi       973Mi
root@fedora:/home/abel/Desktop#
```

2. Check and Start Process

```
#!/bin/bash

PROCESS_NAME="your_process_here"

if pgrep "$PROCESS_NAME" > /dev/null; then
    echo "$PROCESS_NAME is already running."
else
    echo "$PROCESS_NAME is not running. Starting it..."
    "$PROCESS_NAME" &
Fi
```

```
root@fedora:~# ./check_staus.sh
top is already running.
root@fedora:~#
```

3. Disk Usage

```bash
#!/bin/bash

# Set partition and threshold
PARTITION=""/dev/sr0
THRESHOLD=80

# Get usage percent without the % sign
USAGE=$(df "$PARTITION" | awk 'NR==2 {gsub("%",""); print $5}')

if [ "$USAGE" -gt "$THRESHOLD" ]; then
    echo "Disk usage on $PARTITION is ${USAGE}% – over threshold of ${THRESHOLD}%" | \
    mail -s "Disk Space Alert" abelvj67@gmail.com
fi
```