

作业1

```
#!/bin/bash

if [[ -n "$1" ]]; then
    PreAvg=$1
else
    PreAvg=100
fi

Space=`free -m | head -n 2 | tail -n 1 | awk '{printf("%s %s", $2, $2 - $3)}'`
Space=(`echo $Space`)
Occupy=`echo "scale=1;(${Space[0]}-${Space[1]})*100/${Space[0]}" | bc`
NowAvg=`echo "scale=1; 0.3*${PreAvg}+0.7*${Occupy}" | bc`
NowTime=`date +%Y-%m-%d_%H:%M:%S`
echo "$NowTime ${Space[0]}M ${Space[1]}M ${Occupy}% ${NowAvg}%"
```

```
lifaqiang@pi7:~$ bash getSpace.sh 100
2018-08-25_16:25:07 927M 853M 7.9% 35.5%
```

这个脚本文件名为getSpace.sh。

作业2

```
#!/bin/bash

TIMENOW=`date +%Y-%m-%d_%H:%M:%S`
SUM_USERS=`cat /etc/passwd | grep /home/ | wc -l`
ACTIVE_USERS=`last | head -n -2 | sort | cut -d ' ' -f 1 | uniq -c | sort -k 1 -n -r | head -n 3 | awk '{printf("%s", $2)}' | sed 's/.$//`
ROOT_USERS=`cat /etc/group | grep 'sudo' | cut -d ':' -f 4`
PRESENT_USERS=`w -h | awk '{printf("%s_%s_%s", $1, $3, $2)}' | sed 's/.$//`

echo "$TIMENOW $SUM_USERS [$ACTIVE_USERS] [$ROOT_USERS] [$PRESENT_USERS]"
```

```
lifaqiang@pi7:~$ bash Users_Info.sh
2018-08-24_20:30:35 46 [Tesla,lifaqian,xinyue] [pi] [Tesla_192.168.1.156_pts/0,lifaqian_192.168.1.136_pts/1,lifaqian_192.168.1.136_pts/2,xinyue_192.168.1.157_pts/3,xinyue_192.168.1.157_pts/4]
```

这个脚本的文件名为Users_Info.sh。