一. 实现MEM

输出： 时间 内存 已用内存 内存剩余 占用百分比动态平均值

```
#!/bin/bash
echo "     时间        总内存        已用内存        内存剩余百分比     占用百分比动态平均值 "

echo -n "`date +%Y%m%d_%H:%M:%S`     "       #时间
#head -n 2 `free -m` | tail -n 1 | cut -d " " -f 2
sum1=`free -m | grep [0-9] | xargs | cut -d " " -f 2 `
echo -n "$sum1          "                     #总内存
sum2=`free -m | grep [0-9] | xargs | cut -d " " -f 3 `
echo -n "$sum2          "                     #已用内存
key=$[${sum1} - ${sum2}]
sum3=`echo "scale=2;${key}*10 / ${sum1}*10" | bc`
echo -n "$sum3%          "                    #剩余的内存百分比
sum4=`echo "scale=2;0.3*${1}+0.7*${sum3}" | bc`
echo  "  $sum4%        "                      #占用百分比动态平均值
```

二. 实现 用户信息统计

输出: 时间 用户总数（非系统用户） 近期活跃用户（3个） 具有root权限用户

当前在线用户 登录ip TTY

```
#!/bin/bash

echo "time  users  user(3)  user(root)  xxx"

time_key=`date +%Y%m%d-%H:%M:%S `     # 时间
echo -n "[$time_key]  "

ans=`last | grep [a-zA-Z0-9] | grep -v "wtmp" | grep -v  "boot" | wc -l`
echo -n "[$ans] "     #用户数

key1=`last | grep [a-zA-Z0-9] | grep -v "wtmp" | grep -v  "boot" | cut -d " "  -f  1
| sort | uniq -c |  sort -n -r | xargs | cut -d " " -f 2`
key2=`last | grep [a-zA-Z0-9] | grep -v "wtmp" | grep -v  "boot" | cut -d " "  -f  1
| sort | uniq -c |  sort -n -r | xargs | cut -d " " -f 4`
key3=`last | grep [a-zA-Z0-9] | grep -v "wtmp" | grep -v  "boot" | cut -d " "  -f  1
| sort | uniq -c |  sort -n -r | xargs | cut -d " " -f 6`
echo -n "[$key1,$key2,$key3] "    #三个活跃用户

echo -n "[`cat /etc/group | grep "sudo" | cut -d ":" -f 4 `] "   # root 权限用户
```

```
#for i in $qwe; do
#     qw=`cut -d ":" -f 1 ${i}`
#     qe=`cut -d ":" -f 4 ${4}`
#     if [[ $qw == "sudo" ]]; then
#         echo -n "[$qe] "
#         break;
#     fi
#done


sum1=`w -h | cut -d " " -f 1 `
sum2=`w -h | cut -d " " -f 3 `
sum3=`w -h | cut -d " " -f 2 `
echo " [$sum1,$sum2,$sum3]"      #在线用户
```

运行结果：