

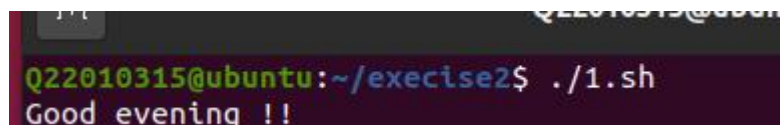
## Experiment 2

**use a editor to finishe the following shell scripts, and run them in Linux system.**

### 1. Obtain the system time, and check whether it is in the

morning, afternoon, or evening.

```
#!/bin/bash
hour = `date +%H`
case
$hour
in
0[1-9] | 1[01] )
echo "Good morining !!"
;;
1[234567] )
echo "Good afternoon !!"
;;
* )
echo "Good evening !! "
;;
Esac
```

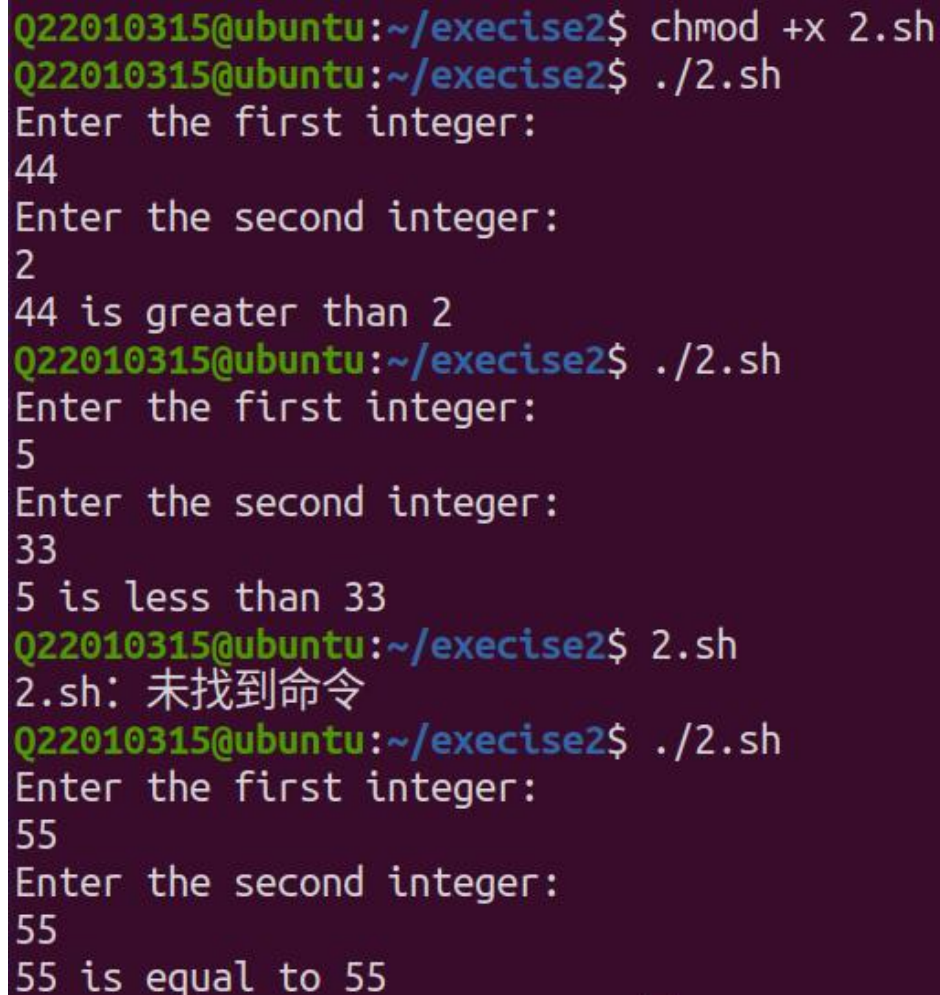


### 2. Input two number, check which one is greater, and

output the result.

```
#!/bin/sh
echo "Enter the first integer:"
read first
echo "Enter the second integer:"
read second
if [ "$first" -gt "$second" ]
then
echo "$first is greater than $second"elif [ "$first" -lt "$second" ]
```

```
then
echo "$FIRST is less than $second"
else
echo "$FIRST is equal to $second"
fi
```

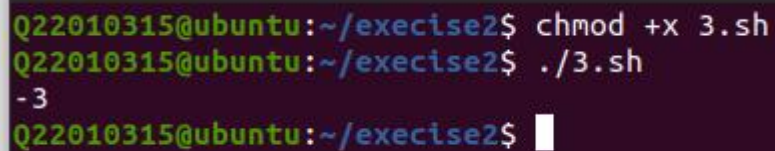


```
Q22010315@ubuntu:~/execise2$ chmod +x 2.sh
Q22010315@ubuntu:~/execise2$ ./2.sh
Enter the first integer:
44
Enter the second integer:
2
44 is greater than 2
Q22010315@ubuntu:~/execise2$ ./2.sh
Enter the first integer:
5
Enter the second integer:
33
5 is less than 33
Q22010315@ubuntu:~/execise2$ 2.sh
2.sh: 未找到命令
Q22010315@ubuntu:~/execise2$ ./2.sh
Enter the first integer:
55
Enter the second integer:
55
55 is equal to 55
```

### 3. Find the minimal value in a given list.

```
#!/bin/bash
smallest=10000
for i in 8 2 18 0 -3 87
do
if test $i -lt $smallest
then
smallest=$i
fi
done
echo $smallest4. Calculate the number of executive file in the current
```

```
directory.  
#!/bin/bash  
count=0  
for i in *  
do  
if test -x $i  
then  
count=`expr $count + 1`  
fi  
done  
echo Total of $count files executable
```

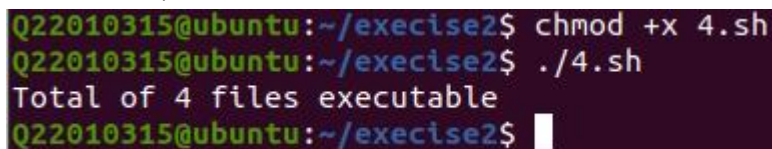


```
Q22010315@ubuntu:~/exercise2$ chmod +x 3.sh  
Q22010315@ubuntu:~/exercise2$ ./3.sh  
-3  
Q22010315@ubuntu:~/exercise2$
```

#### 4. Calculate the number of executive file in the current

**directory.**

```
#!/bin/bash  
count=0  
for i in *  
do  
if test -x $i  
then  
count=`expr $count + 1`  
fi  
done  
echo Total of $count files executable
```



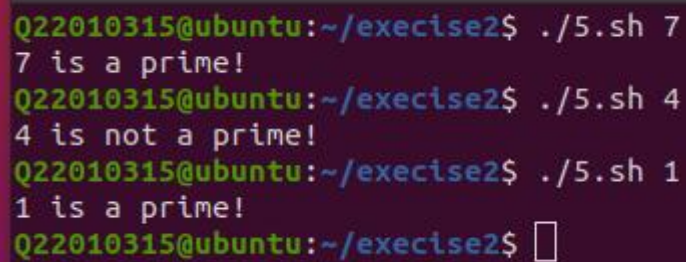
```
Q22010315@ubuntu:~/exercise2$ chmod +x 4.sh  
Q22010315@ubuntu:~/exercise2$ ./4.sh  
Total of 4 files executable  
Q22010315@ubuntu:~/exercise2$
```

#### 5. Check whether a given number is a prime, you have to

**write a function, and call the function.**

```
prime( )
```

```
{
flag=1
j=2
while [ $j -le `expr $1 / 2` ]
do
if [ `expr $1 % $j` -eq 0 ]
then
flag=0
break
fi
j=`expr $j + 1`
done
if [ $flag -eq 1 ]
then
return 1
else
return 0
fi
}prime $1
if [ $? -eq 1 ]
then
echo "$1 is a prime!"
else
echo "$1 is not a prime!"
fi
```



```
Q22010315@ubuntu:~/exercise2$ ./5.sh 7
7 is a prime!
Q22010315@ubuntu:~/exercise2$ ./5.sh 4
4 is not a prime!
Q22010315@ubuntu:~/exercise2$ ./5.sh 1
1 is a prime!
Q22010315@ubuntu:~/exercise2$
```