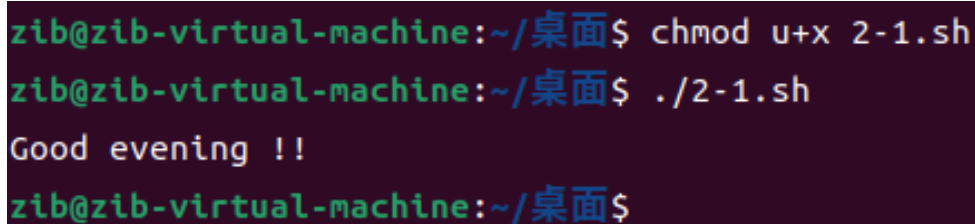


# Experiment 2

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 themorning, 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
```

A terminal window with a dark background and light-colored text. The prompt is 'zib@zib-virtual-machine:~/桌面\$'. The user enters 'chmod u+x 2-1.sh'. The prompt is 'zib@zib-virtual-machine:~/桌面\$'. The user enters './2-1.sh'. The output is 'Good evening !!'. The prompt is 'zib@zib-virtual-machine:~/桌面\$'.

```
zib@zib-virtual-machine:~/桌面$ chmod u+x 2-1.sh
zib@zib-virtual-machine:~/桌面$ ./2-1.sh
Good evening !!
zib@zib-virtual-machine:~/桌面$
```

## 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
```

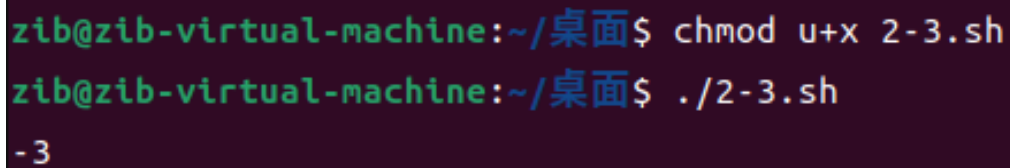
```
zib@zib-virtual-machine:~/桌面$ chmod u+x 2-2.sh
zib@zib-virtual-machine:~/桌面$ ./2-2.sh
Enter the first integer:
1
Enter the second integer:
2
1 is less than 2
zib@zib-virtual-machine:~/桌面$ ./2-2.sh
Enter the first integer:
5
Enter the second integer:
3
5 is greater than 3
zib@zib-virtual-machine:~/桌面$ ./2-2.sh
Enter the first integer:
4
Enter the second integer:
4
4 is equal to 4
zib@zib-virtual-machine:~/桌面$
```

### 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 $smallest
```

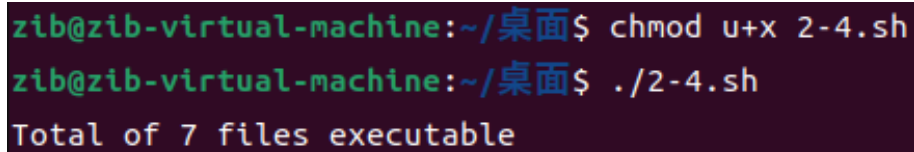
A terminal window with a dark purple background. The prompt is 'zib@zib-virtual-machine:~/桌面\$'. The user enters 'chmod u+x 2-3.sh'. The prompt is 'zib@zib-virtual-machine:~/桌面\$'. The user enters './2-3.sh'. The output is '-3'.

```
zib@zib-virtual-machine:~/桌面$ chmod u+x 2-3.sh
zib@zib-virtual-machine:~/桌面$ ./2-3.sh
-3
```

#### 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
```



A terminal window with a dark purple background and light green text. The prompt is 'zib@zib-virtual-machine:~/桌面\$'. The first command is 'chmod u+x 2-4.sh'. The second command is './2-4.sh'. The output is 'Total of 7 files executable'.

```
zib@zib-virtual-machine:~/桌面$ chmod u+x 2-4.sh
zib@zib-virtual-machine:~/桌面$ ./2-4.sh
Total of 7 files executable
```

## 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
```

```
zib@zib-virtual-machine:~/桌面$ chmod u+x 2-5.sh
zib@zib-virtual-machine:~/桌面$ ./2-5.sh 3
3 is a prime!
zib@zib-virtual-machine:~/桌面$ ./2-5.sh 6
6 is not a prime!
zib@zib-virtual-machine:~/桌面$
```