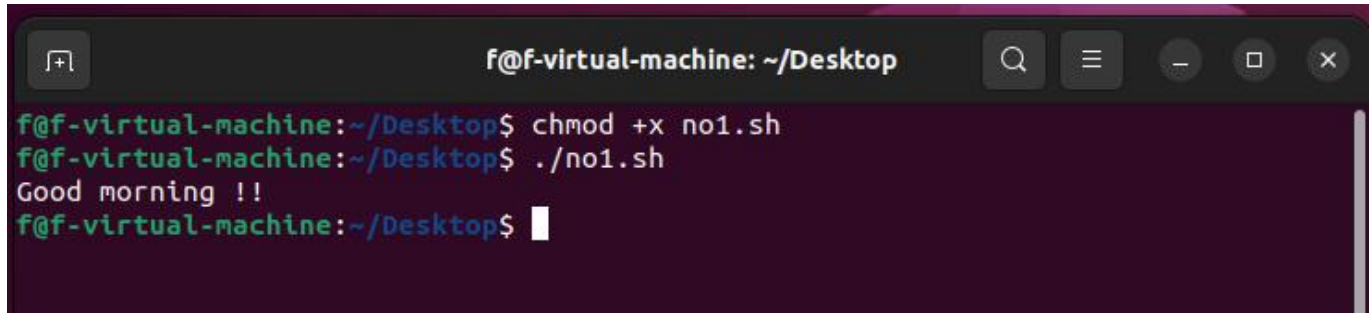


# Experiment 2

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
```

A screenshot of a terminal window titled 'f@f-virtual-machine: ~/Desktop'. The terminal shows the following commands and output:   
f@f-virtual-machine:~/Desktop\$ chmod +x no1.sh   
f@f-virtual-machine:~/Desktop\$ ./no1.sh   
Good morning !!   
f@f-virtual-machine:~/Desktop\$   
The terminal has a dark purple background and a light-colored cursor.

## 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
```

```
cs less than 7
f@f-virtual-machine:~/Desktop$ chmod +x no2.sh
f@f-virtual-machine:~/Desktop$ ./no2.sh
Enter the first integer:
5
Enter the second integer:
8
5 is less than 8
```

### 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
```

```
5 is less than 8
f@f-virtual-machine:~/Desktop$ vim no3.sh
f@f-virtual-machine:~/Desktop$ chmod +x no3.sh
f@f-virtual-machine:~/Desktop$ ./no3.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
```

```
f@f-virtual-machine:~/Desktop$ vim no4.sh
f@f-virtual-machine:~/Desktop$ chmod +x no4.sh
f@f-virtual-machine:~/Desktop$ ./no4.sh
Total of 5 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
```

```
f@f-virtual-machine:~/Desktop/linux$ chmod +x no5.sh
f@f-virtual-machine:~/Desktop/linux$ ./no5.sh
5
5 is a prime !
```

