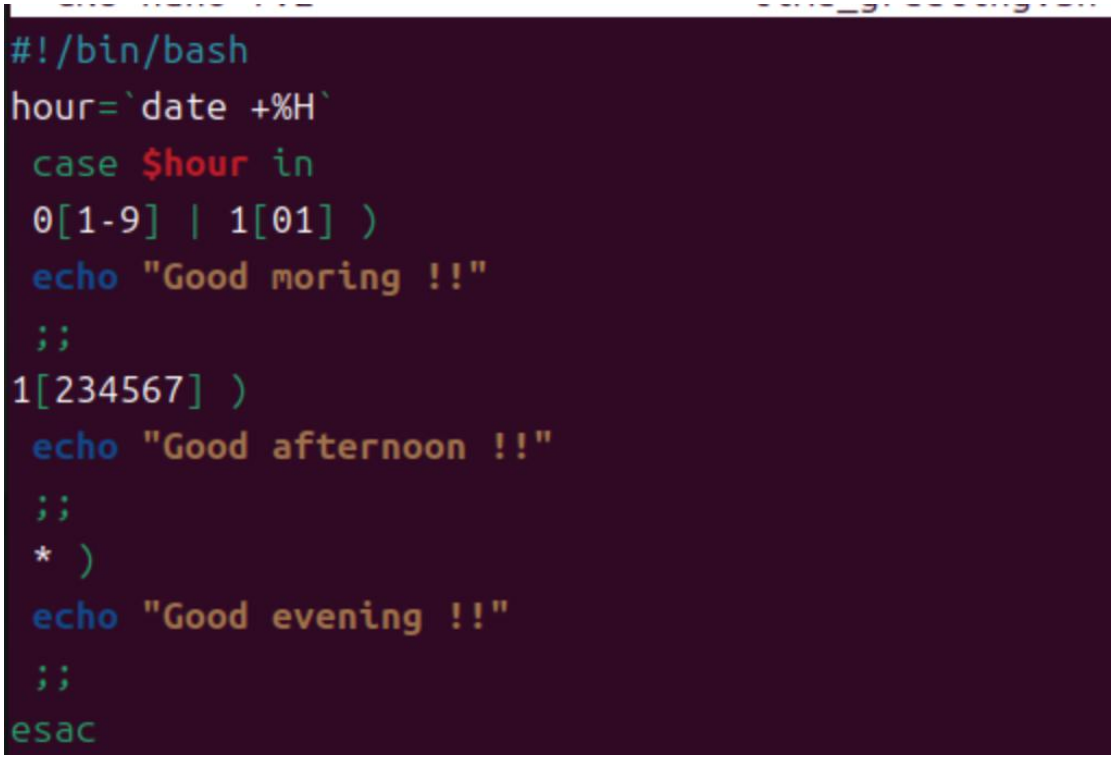
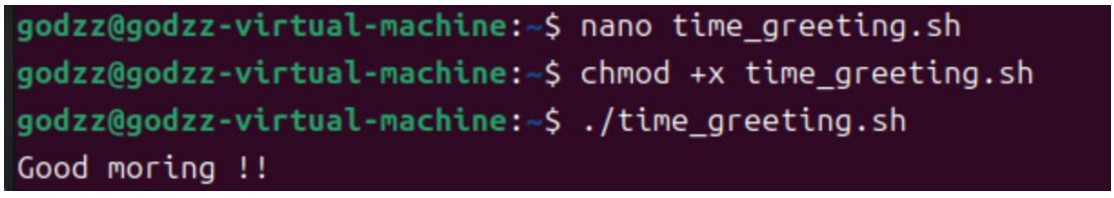
1. Obtain the system time, and check whether it is in the morning, afternoon, or evening.

```
#!/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
```



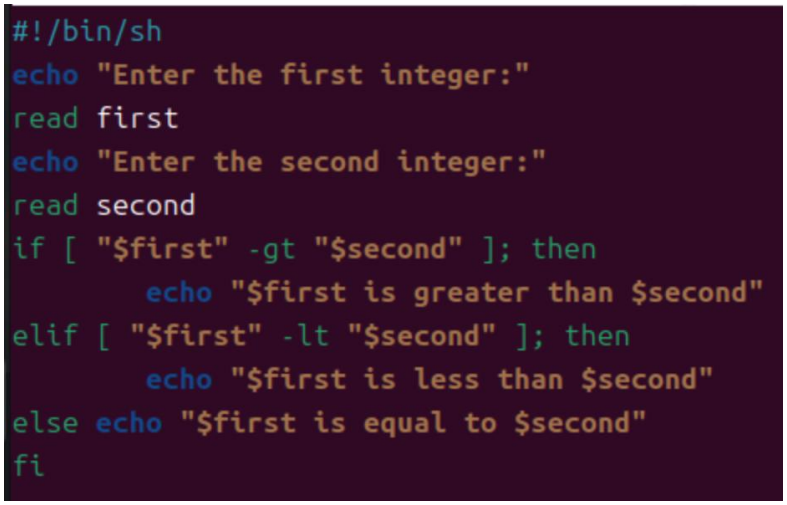
```
#!/bin/bash
hour=`date +%H`
 case $hour in
 0[1-9] | 1[01] )
 echo "Good moring !!"
 ;;
1[234567] )
 echo "Good afternoon !!"
 ;;
 * )
 echo "Good evening !!"
 ;;
esac
```



```
godzz@godzz-virtual-machine:~$ nano time_greeting.sh
godzz@godzz-virtual-machine:~$ chmod +x time_greeting.sh
godzz@godzz-virtual-machine:~$ ./time_greeting.sh
Good moring !!
```

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
```



```
godzz@godzz-virtual-machine:~$ nano compare_numbers.sh
godzz@godzz-virtual-machine:~$ chmod +x compare_numbers.sh
godzz@godzz-virtual-machine:~$ ./ compare_numbers.sh
bash: ./: 是一个目录
godzz@godzz-virtual-machine:~$ ./compare_numbers.sh
Enter the first integer:
5
Enter the second integer:
3
5 is greater than 3
godzz@godzz-virtual-machine:~$ ./compare_numbers.sh
Enter the first integer:
5
Enter the second integer:
5
5 is equal to 5
godzz@godzz-virtual-machine:~$ ./compare_numbers.sh
Enter the first integer:
3
Enter the second integer:
5
3 is less than 5
godzz@godzz-virtual-machine:~$
```

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
```

```
#!/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
```

```
godzz@godzz-virtual-machine:~$ nano find_mini.sh
godzz@godzz-virtual-machine:~$ chmod +x find_mini.sh
godzz@godzz-virtual-machine:~$ ./find_mini.sh
-3
godzz@godzz-virtual-machine:~$
```

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
```

```
#!/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
```

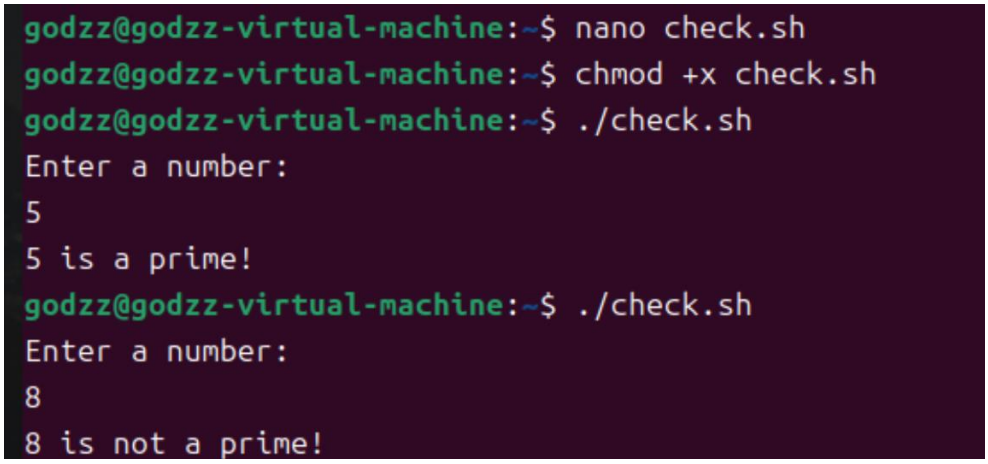
```
godzz@godzz-virtual-machine:~$ nano find_mini.sh
godzz@godzz-virtual-machine:~$ nano calculate.sh
godzz@godzz-virtual-machine:~$ chmod +x calculate.sh
godzz@godzz-virtual-machine:~$ ./calculate.sh
Total of 15 files executable
godzz@godzz-virtual-machine:~$ ls
公共的   图片   音乐             B22040819          find_mini.sh
模板     文档   桌面             calculate.sh       snap
视频     下载   archlab-handout  compare_numbers.sh  time_greeting.sh
godzz@godzz-virtual-machine:~$
```

5. Check whether a given number is a prime, you have to write a function, and call the function.

```
prime( )
{
 flag=1
```

```
#!/bin/bash
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
}
```

```
echo "Enter a number:"
read number
prime $number
if [ $? -eq 1 ]; then
 echo "$number is a prime!"
else
 echo "$number is not a prime!"
fi
```


godzz@godzz-virtual-machine:~$ nano check.sh
godzz@godzz-virtual-machine:~$ chmod +x check.sh
godzz@godzz-virtual-machine:~$ ./check.sh
Enter a number:
5
5 is a prime!
godzz@godzz-virtual-machine:~$ ./check.sh
Enter a number:
8
8 is not a prime!