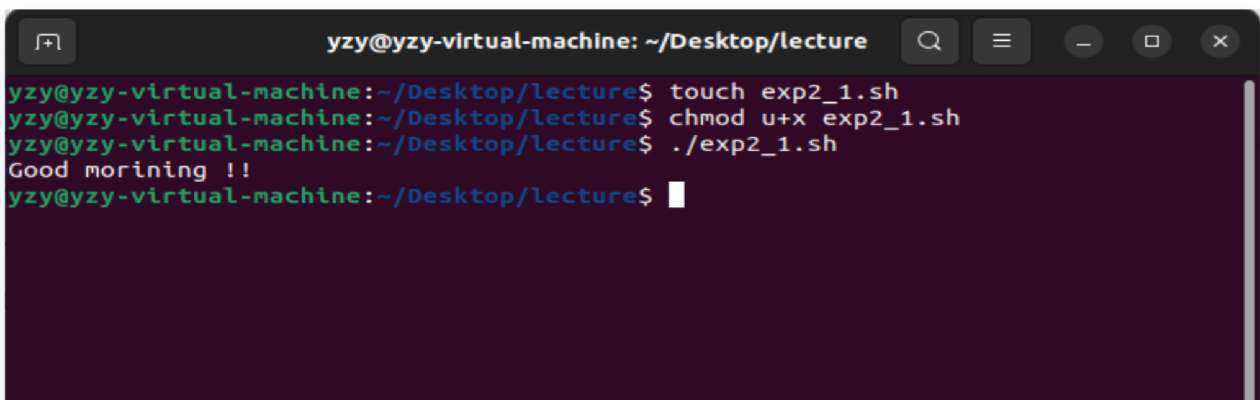


# Experiment 2

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

```
1  #!/bin/bash
2  hour = `date +%H`
3  case $hour in
4  0[1-9] | 1[01] )
5  echo "Good morining !!"
6  ;;
7  1[234567] )
8  echo "Good afternoon !!"
9  ;;
10 * )
11 echo "Good evening !! "
12 ;;
13 Esac
```



```
yzy@yzy-virtual-machine: ~/Desktop/lecture
yzy@yzy-virtual-machine:~/Desktop/lecture$ touch exp2_1.sh
yzy@yzy-virtual-machine:~/Desktop/lecture$ chmod u+x exp2_1.sh
yzy@yzy-virtual-machine:~/Desktop/lecture$ ./exp2_1.sh
Good morining !!
yzy@yzy-virtual-machine:~/Desktop/lecture$
```

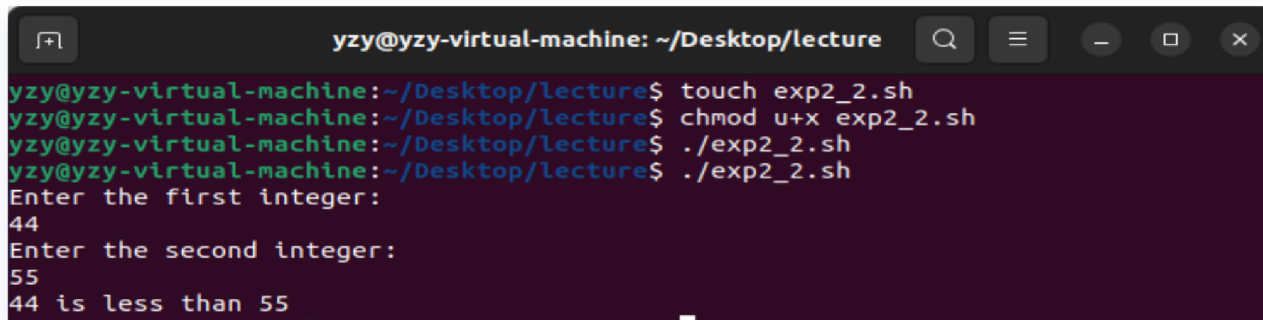
2.Input two number, check which one is greater, and output the result.

```
1  #!/bin/sh
2  echo "Enter the first integer:"
3  read first
4  echo "Enter the second integer:"
```

```

5 read second
6 if [ "$first" -gt "$second" ]
7 then
8 echo "$first is greater than $second"
9 elif [ "$first" -lt "$second" ]
10 then
11 echo "$FIRST is less than $second"
12 else
13 echo "$FIRST is equal to $second"
14 fi

```



```

yzy@yzy-virtual-machine: ~/Desktop/lecture
yzy@yzy-virtual-machine:~/Desktop/lecture$ touch exp2_2.sh
yzy@yzy-virtual-machine:~/Desktop/lecture$ chmod u+x exp2_2.sh
yzy@yzy-virtual-machine:~/Desktop/lecture$ ./exp2_2.sh
yzy@yzy-virtual-machine:~/Desktop/lecture$ ./exp2_2.sh
Enter the first integer:
44
Enter the second integer:
55
44 is less than 55

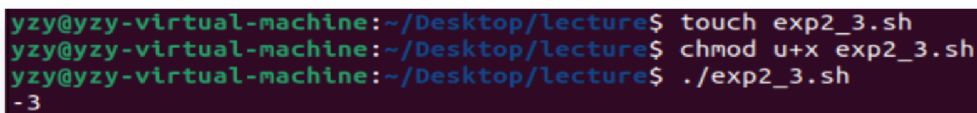
```

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

```

1 #!/bin/bash
2 smallest=10000
3 for i in 8 2 18 0 -3 87
4 do
5 if test $i -lt $smallest
6 then
7     smallest=$i
8 fi
9 done
10 echo $smallest

```



```

yzy@yzy-virtual-machine:~/Desktop/lecture$ touch exp2_3.sh
yzy@yzy-virtual-machine:~/Desktop/lecture$ chmod u+x exp2_3.sh
yzy@yzy-virtual-machine:~/Desktop/lecture$ ./exp2_3.sh
-3

```

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

```

1  #!/bin/bash
2  count=0
3  for i in *
4  do
5  if test -x $i
6  then
7  count=`expr $count + 1`
8  fi
9  done
10 echo Total of $count files executable

```

```

yzy@yzy-virtual-machine:~/Desktop/lecture$ touch exp2_4.sh
yzy@yzy-virtual-machine:~/Desktop/lecture$ chmod u+x exp2_4.sh
yzy@yzy-virtual-machine:~/Desktop/lecture$ ./exp2_4.sh
Total of 10 files executable

```

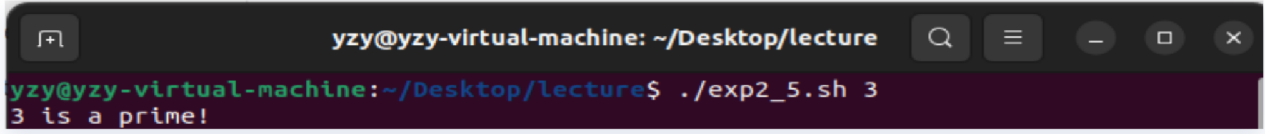
5. Check whether a given number is a prime, you have to write a function, and call the function.

```

1  prime( )
2  {
3  flag=1
4  j=2
5  while [ $j -le `expr $1 / 2` ]
6  do
7  if [ `expr $1 % $j` -eq 0 ]
8  then
9  flag=0
10 break
11 fi
12 j=`expr $j + 1`
13 done
14 if [ $flag -eq 1 ]
15 then
16 return 1
17 else
18 return 0
19 fi
20 }
21 prime $1
22 if [ $? -eq 1 ]
23 then
24 echo "$1 is a prime!"

```

```
25     else
26     echo "$1 is not a prime!"
27     fi
```

A terminal window with a dark background and light text. The title bar shows 'yzy@yzy-virtual-machine: ~/Desktop/lecture'. The prompt is 'yzy@yzy-virtual-machine:~/Desktop/lecture\$'. The command entered is './exp2\_5.sh 3'. The output is '3 is a prime!'.

```
yzy@yzy-virtual-machine: ~/Desktop/lecture
yzy@yzy-virtual-machine:~/Desktop/lecture$ ./exp2_5.sh 3
3 is a prime!
```