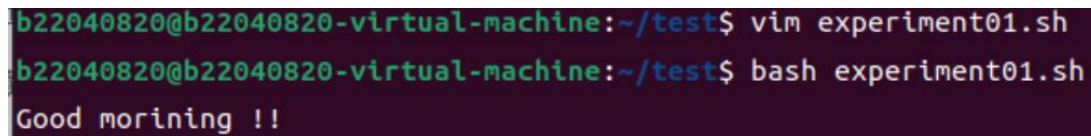


实验二

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
```

实验结果如下：

A terminal window with a dark background. The prompt is 'b22040820@b22040820-virtual-machine:~/test\$'. The user enters 'vim experiment01.sh'. The prompt changes to 'b22040820@b22040820-virtual-machine:~/test\$' and the user enters 'bash experiment01.sh'. The output is 'Good morining !!'.

```
b22040820@b22040820-virtual-machine:~/test$ vim experiment01.sh
b22040820@b22040820-virtual-machine:~/test$ bash experiment01.sh
Good morining !!
```

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
```

实验结果如下：

```

b22040820@b22040820-virtual-machine:~/test$ vim experiment02.sh
b22040820@b22040820-virtual-machine:~/test$ bash experiment02.sh
Enter the first integer:
41
Enter the second integer:
23
41 is greater than 23

```

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

```

实验结果如下:

```

b22040820@b22040820-virtual-machine:~/test$ vim experiment03.sh
b22040820@b22040820-virtual-machine:~/test$ bash experiment03.sh
-3

```

4. Calculate the number of executable 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

```

实验结果如下:

```

b22040820@b22040820-virtual-machine:~/test$ vim experiment04.sh
b22040820@b22040820-virtual-machine:~/test$ bash experiment04.sh
Total of 0 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
```

实验结果如下：

```
b22040820@b22040820-virtual-machine:~/test$ vim experiment05.sh  
b22040820@b22040820-virtual-machine:~/test$ bash experiment05.sh 7  
7 is a prime!
```