Linex 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
```

```
hsh@hsh-virtual-machine:~/B22040504$ nano greeting.sh
hsh@hsh-virtual-machine:~/B22040504$ ./greeting.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
```

```
hsh@hsh-virtual-machine:~/B22040504$ nano greeting.sh
hsh@hsh-virtual-machine:~/B22040504$ ./greeting.sh
Enter the first integer:
5
Enter the second integer:
2
5 is greater than 2
```

```
hsh@hsh-virtual-machine:~/B22040504$ nano greeting.sh
hsh@hsh-virtual-machine:~/B22040504$ ./greeting.sh
Enter the first integer:
2
Enter the second integer:
5
2 is less than 5
```

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
```

```
hsh@hsh-virtual-machine:~/B22040504$ nano greet.sh
hsh@hsh-virtual-machine:~/B22040504$ ./greet.sh
bash: ./greet.sh: 权限不够
hsh@hsh-virtual-machine:~/B22040504$ chmod +x greet.sh
hsh@hsh-virtual-machine:~/B22040504$ ./greet.sh
-3
```

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

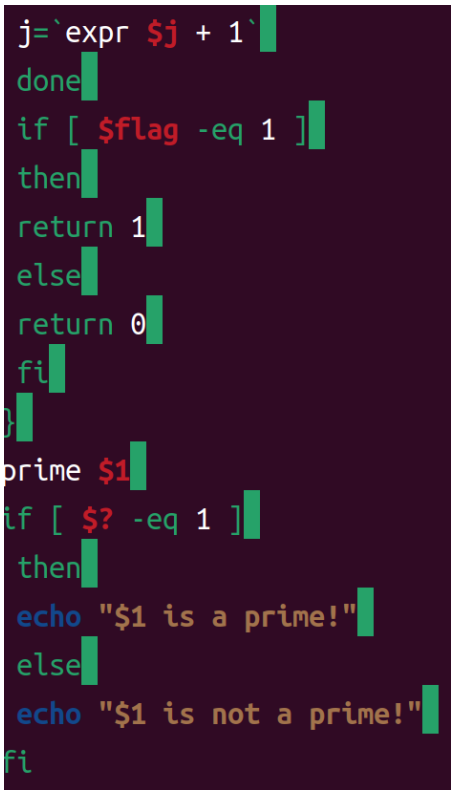
```
#!/bin/bash
count=0
for i in *
 do
if test -x $i
then
 count=`expr $count + 1`
fi
done
echo Total of $count files executable
```

```
hsh@hsh-virtual-machine:~/B22040504$ nano calculate.sh
hsh@hsh-virtual-machine:~/B22040504$ ./calculate.sh
bash: ./calculate.sh: 权限不够
hsh@hsh-virtual-machine:~/B22040504$ chmod +x calculate.sh
hsh@hsh-virtual-machine:~/B22040504$ ./calculate.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.

```
hsh@hsh-virtual-machine:~/B22040504$ nano check.sh
hsh@hsh-virtual-machine:~/B22040504$ chmod +x check.sh
hsh@hsh-virtual-machine:~/B22040504$ ./check.sh
expr: 语法错误: 未预期的参数 "2"
./check.sh: 第 5 行: [: 2: 需要一元运算符
 is a prime!
hsh@hsh-virtual-machine:~/B22040504$ ./check.sh 7
7 is a prime!
```

```
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
```


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