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
```

结果:

```
b22040523@localhost:~$ ./2-1-1
Good morning !!
b22040523@localhost:~$
```

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
```

```
b22040523@localhost:~$ chmod +x 2-2.sh
b22040523@localhost:~$ ./2-2.sh
Enter the first integer:

Enter the second integer:

is less than 35
b22040523@localhost:~$
```

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
```

结果:

```
b22040523@localhost:~ Q = - - ×

b22040523@localhost:~$ chmod +x 2-3.sh

b22040523@localhost:~$ ./2-3.sh

-3

b22040523@localhost:~$
```

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

结果:

```
b22040523@localhost:~$ chmod +x 2-4.sh
b22040523@localhost:~$ ./2-4.sh
Total of 28 files executable
b22040523@localhost:~$
```

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` ]
if [ `expr $1 % $j` -eq 0 ]
then
flag=0
break
fi
j=\ensuremath{`expr\ \$j\ +\ 1`}
if [ $flag -eq 1 ]
then
return 1
else
return 0
fi
prime $1 if [ $? -eq 1 ]
echo "$1 is a prime!"
else
echo "$1 is not a prime!"
```

结果:

```
b22040523@localhost:~$ chmod +x 2-5-5.sh
b22040523@localhost:~$ ./2-5-5.sh
Please provide a number to check:
4
4 is not a prime!
b22040523@localhost:~$
```