

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

```
talys@talys-virtual-machine:~$ cat exp2-1.sh
#!/bin/bash
hour=`date +%H`
case $hour in
0[1-9] | 1[01] )
echo "Good morining !!"
;;
1[234567] )
echo "Good afternoon !!"
;;
* )
echo "Good evening !! "
;;
esac
talys@talys-virtual-machine:~$ ./exp2-1.sh
Good morining !!
```

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

```
talys@talys-virtual-machine:~$ cat exp2-2.sh
#!/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 $second"
fi
talys@talys-virtual-machine:~$ ./exp2-2.sh
Enter the first integer:
4
Enter the second integer:
6
4 is less than 6
```

3. Find the minimal value in a given list.

```
talys@talys-virtual-machine:~$ cat exp2-3.sh
#!/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 $smallest
talys@talys-virtual-machine:~$ ./exp2-3.sh
-3
```

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

```
talys@talys-virtual-machine:~$ cat exp2-4.sh
#!/bin/bash
count=0
for i in *
do
if test -x $i
then
count=`expr $count + 1`
fi
done
echo Total of $count files executable
talys@talys-virtual-machine:~$ ./exp2-4.sh
Total of 22 files executable
```

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

```
talys@talys-virtual-machine:~$ cat exp2-5.sh
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 "$1 is not a prime!"
fi
talys@talys-virtual-machine:~$ ./exp2-5.sh 12
12 is not a prime!
```