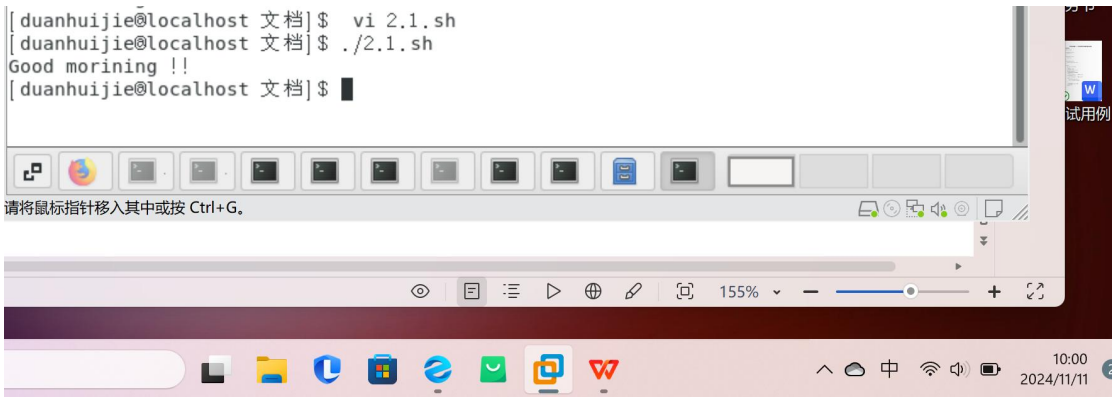
1. Obtain the system time, and check whether it is in the morning, afternoon, or evening.

```
#!/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：

```
#!/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
```



```
#!/bin/sh
echo "Enter the first integer:"
read first
echo "Enter the second intrger:"
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
```

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：

```
[duanhuijie@localhost 文档]$ vi 2.2.sh
[duanhuijie@localhost 文档]$ ./2.2.sh
Enter the first integer:
1
Enter the second intrger:
2
1 is less than 2
```

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：

```
#!/bin/bash
smallest=10000
for i in 8 2 18 0 -3 8 87
do
if test $i -lt $smallest
then
smallest=$i
fi
done
echo $smallest
```

```
[duanhuijie@localhost 文档]$ touch 2.3.sh
[duanhuijie@localhost 文档]$ vi 2.3.sh
[duanhuijie@localhost 文档]$ chmod u+x 2.3.sh
[duanhuijie@localhost 文档]$ ./2.3.sh
-3
[duanhuijie@localhost 文档]$
```

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
```

```
#!/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
```

```
[duanhuijie@localhost 文档]$ touch 2.4.sh
[duanhuijie@localhost 文档]$ vi 2.4.sh
[duanhuijie@localhost 文档]$ chmod u+x 2.4.sh
[duanhuijie@localhost 文档]$ ./2.4.sh
Total of expr $count+1 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：

```
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
}
read number
prime $number
if [ $? -eq 1 ]
then
echo "$number is a prime!"
else
echo "$number is not a prime!"
fi
```

```
[duanhuijie@localhost 文档]$ vi 2.5.sh
[duanhuijie@localhost 文档]$ ./2.5.sh
3
3 is a prime!
```