

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
```

```
1#!/bin/bash
2hour=`date +%H`
3case $hour in
4 0[1-9]|1[01])
5     echo "Good morning !!"
6     ;;
7 1[2-6]|1[7])
8     echo "Good afternoon !!"
9     ;;
10 *)
11     echo "Good evening !!"
12     ;;
13 esac
14|
```

```
b22040522@rxbnz-virtual-machine:~/Desktop$ chmod u+x 1.sh
b22040522@rxbnz-virtual-machine:~/Desktop$ ./1.sh
Good morning !!
```

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
```

```
1 #!/bin/sh
2 echo "Enter the first integer:"
3 read first
4 echo "Enter the second integer:"
5 read second
6 if [ "$first" -gt "$second" ]
7 then
8 echo "$first is greater than $second"
9 elif [ "$first" -lt "$second" ]
10 then
11 echo "$FIRST is less than $second"
12 else
13 echo "$FIRST is equal to $second"
14 fi
```

```
b22040522@rxbnz-virtual-machine:~/Desktop$ chmod u+x 2.sh
b22040522@rxbnz-virtual-machine:~/Desktop$ ./2.sh
Enter the first integer:
21
Enter the second integer:
44
21 is less than 44
```

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
```

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

```
b22040522@rxbnz-virtual-machine:~/Desktop$ chmod u+x 3.sh
b22040522@rxbnz-virtual-machine:~/Desktop$ ./3.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
```

```
1 #!/bin/bash
2 count=0
3 for i in *
4 do
5 if test -x $i
6 then
7 count=`expr $count + 1`
8 fi
9 done
10 echo Total of $count files executable
```

```
b22040522@rxbnz-virtual-machine:~/Desktop$ chmod u+x 4.sh
b22040522@rxbnz-virtual-machine:~/Desktop$ ./4.sh
Total of 4 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
```

```

1#!/bin/bash
2
3prime() {
4    local num=$1
5    local flag=1
6    local j=2
7    while [ $j -le $((num / 2)) ]
8    do
9        if [ $((num % j)) -eq 0 ]
10        then
11            flag=0
12            break
13        fi
14        j=$((j + 1))
15    done
16    echo $flag
17}
18
19if [ -z "$1" ]; then
20    echo "Please provide a number to check:"
21    read input
22else
23    input=$1
24fi
25
26result=$(prime $input)
27if [ $result -eq 1 ]
28then
29    echo "$input is a prime!"
30else
31    echo "$input is not a prime!"
32fi
33|

```

```

b22040522@rxbnz-virtual-machine:~/Desktop$ chmod u+x 5.sh
b22040522@rxbnz-virtual-machine:~/Desktop$ ./5.sh
Please provide a number to check:
3
3 is a prime!
b22040522@rxbnz-virtual-machine:~/Desktop$ ./5.sh
Please provide a number to check:
4

```