Practice Questions

In [5]:
```
# Function to print the nearest to zero in array (if multiple nos are there
li=[-1,-2,2,3]
li.sort()
pl=[]
for i in li:
    pl.append(abs(i))
pl.sort()
if pl[0] in li:
    print(pl[0])
else:
    print(-pl[0])

```

```
-1
```

In [14]:
```
# Function to print the farest to zero in array (if multiple nos are there p
li=[-1,-2,2,3]
li.sort()
pl=[]
for i in li:
    pl.append(abs(i))
pl.sort()
if pl[0] in li:
    print(pl[0])
else:
    print(-pl[0])

```

```
-1
```

```
### Problem3
- You are given three numbers, a,b and c.
- Write a program to find the largest number
- which is less than or equal to  c and leaves
- remainder b when divided by a

```

In [5]:
```
def largestnumber(a,b,c):
    for i in range(c,a,-1):  #c,c-1,...a
        if i % a == b:
            return i
    return -1

largestnumber(3,2,9)
```

Out[5]: 8

In [ ]:
```
### prime 2, 3, 5, 7, 7, 11 ,13
### fib 0 , 1, 1 , 2 , 3 , 5
### data 2 0 3 1 5 1 7 2 11 3 13 5
         0 1 2 3 4 5 6 7 8 9  10 11

def febinocci(n):
    i=0
    first num=0
    second num=0
    while i

```

In [10]:
```
####count divisors
def countdivisors(i,j,k):
    count=0
    for n in range(i,j+1):
        if n % k == 0:
            count +=1
    return count

s=input()
s=s.split()
for n in s:
    i=int(s[0])
    j=int(s[1])
    k=int(s[2])
print(countdivisors(1,10,1))
```

```
10
```

In [1]:
```
####count divisors
def countdivisors(i,j,k):
    count=0
    for n in range(i,j+1):
        if n % k == 0:
            count +=1
    return count
countdivisors(1,10,1)
```

Out[1]:
```
10
```

In [2]:
```
###factorial

n=int(input())
def factorial(n):
    f=1
    for i in range(1,n+1):
        f=f*i;
    print(f)
    return
factorial(n)

```

```
5
120
```

In [1]:
```
#### Toggle Of  string

k=input()
for i in k:
    if i.isupper():
        print(i.lower(),end="")
    else:
        print(i.upper(),end="")

```

```
SriKaNyA
sRIkAnYa
```

In [2]:
```
### String Palindrome
def stringpalindrome(s):
    if s==s[::-1]:
        print("YES")
    else:
        print("NO")
s=input()
stringpalindrome(s)

```

```
aba
YES
```

In [7]:
```
chr(ord('A')+32)
```

Out[7]:
```
'a'
```

In [4]:
```
for i in range(0,365):
    print(i,"--->",chr(i))
```

```
0 --->
1 ---> □
2 ---> □
3 ---> □
4 ---> □
5 ---> □
6 ---> □
7 ---> □
8 --->
9 --->
10 --->

11 ---> □
12 --->
13 --->
14 ---> □
15 ---> □
16 ---> □
17 ---> □
```

In [8]:
```
#Prime numbers
def prime(n):
    count=0
    for i in range(1,n+1):
        if n%i==0:
            count=count+1
    if count==2:
        return True
    else:
        return False

def isprime(a):
    for i in range(1,a):
        if prime(i):
            print(i,end=" ")


n=int(input())
isprime(n)

```

```
9
2 3 5 7
```

In [2]:
```
### Two Strings

n=int(input())
def twostrings(f,s):
    f1=1
    if len(f)!=len(s):
        return 'NO'
    else:
        for i in range(len(f)):
            if f.count(f[i])!=s.count(f[i]):
                return 'NO'
        if f1==1:
                return 'YES'
for i in range(n):
    st=input().split()
    f=st[0]
    s=st[1]
    print(twostrings(f,s))

```

```
3
sumit mitsu
YES
ambuj jumba
YES
abhi hibb
NO
```

In [6]:
```
### Duration
def duration(sh,sm,eh,em):
    a=(sh*60)+sm
    b=(eh*60)+em
    c=b-a
    d=c//60
    e=c%60
    print(d,e)


n=int(input())
for i in range(n):
    s=input().split()
    sh=int(s[0])
    sm=int(s[1])
    eh=int(s[2])
    em=int(s[3])
    duration(sh,sm,eh,em)



```

```
2
1 44 2 14
0 30
2 42 8 23
5 41
```

In [ ]:
```
### Play With Numbers
```