In [7]:

```
# Find the factors of a number

import time

def print_factors(x):
   print("The factors of",x,"are:")
   for i in range(1, x + 1):
       if x % i == 0:
           print(i)

# take input from the user
num = int(input("Enter a number: "))

t1 = time.time()
print_factors(num)
t2 = time.time()
print(t2-t1)
```

```
Enter a number: 100
The factors of 100 are:
1
2
4
5
10
20
25
50
100
0.00018978118896484375
```

In [6]:

```
# Find max number #1

def find_max (l):
    max = 0
    for x in l:
        if x > max:
            max = x
    return max

print(find_max([-20,1,6,7,20,5]))
```

```
20
```

In [8]:

```
# Find max number #2
# 使用递归

def find_max (l):
    if len(l) == 1:
        return l[0]
    v1 = l[0]
    v2 = find_max(l[1:])
    if v1 > v2:
        return v1
    else:
        return v2

print(find_max([1,6,7,20,5]))
```

```
20
```

In [ ]:

```

```