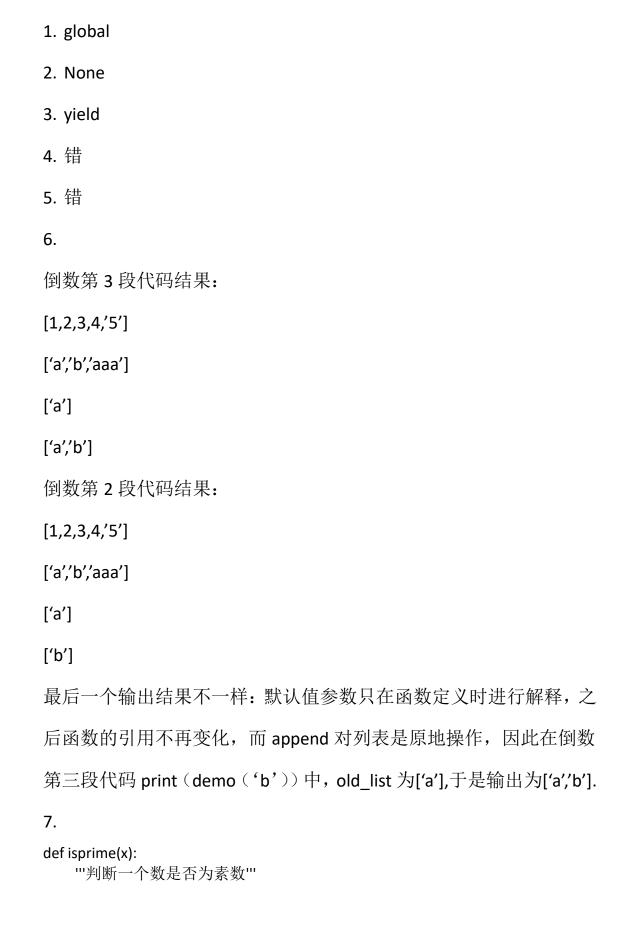
## 第五章作业



```
if x>1:
          for i in range(2,int(x**0.5)+1):
               if x%i==0:
                    return True
    return False
if name ==' main ':
   x=int(input('请输入一个数:'))
   if isprime(x):
    print(x,'为素数',sep=")
   else:
     print(x,'不是素数',sep=")
8.
def calculator(a):
    import re
    x=(len(re.findall('[a-z]',
a)), len(re.findall('[A-Z]',a)), len(re.findall(r'\d',a)), len(re.findall('[^a-zA-z0-9]',a)))
    return x
if name ==' main ':
    a=input('请输入一个字符串:')
    b=['小写','大写','数字','其他']
    print(calculator(a))
    print(dict(zip(b,calculator(a))))
9.
会,下列代码结果为3,5
def demo():
    x=3
    print(x)
if __name__=='__main___':
    x=5
    demo()
    print(x)
10.
def getsandm(*v):
  print(v)
  print(max(v))
  print(sum(v))
if __name__=='__main__':
   getsandm(1,2,3,4,566,99)
11.
```

```
def Sum(a):
     from functools import reduce
     return reduce(lambda x,y:x+y,a)
if __name__=='__main___':
     a=[1,2,3,4,5]
     b=(7,8,9,6)
     print(Sum(a))
     print(Sum(b))
12.
def sorteds(items):
     temp = items[:]
     temp.sort()
     return temp
if __name__=='__main__':
     x=[4,5,3,2,9,8,0]
     y=[9,3,0,2,9,4,10,11]
     print(sorteds(x))
     print(sorteds(y))
13.
def mymap(func, *seqs):
     for args in zip(*seqs):
         yield func(*args)
if __name__ == '__main___':
     a=['1','2','3']
     print(list(map(int,a)))
14.
def myfilter(func,seq):
     for i in seq:
          if func(i)==True:
               yield i
if __name__=='__main___':
     seq=['foo','x41','?!','***']
     print(list(myfilter(str.isalnum,seq)))
```