

The 'for' Statement

```
#-----
def Print( s ) :
    # Print the items of sequence 's', one per line

    for item in s :
        print( item )

#-----

def PrintWithNumbers( s ) :
    # Print the items of sequence 's', one per line, with line numbers

    linenum = 0
    for item in s :
        linenum = linenum + 1
        print( linenum, item )

#-----

def Length( s ) :
    # The number of items in sequence 's' [ Python builtin: len( s ) ]

    length = 0
    for item in s :
        length = length + 1

    return length

#-----

def Occurs( x, s ) :
    # Is item 'x' an element of sequence 's' ? [ Python builtin: x in s ]

    for item in s :
        if item == x :
            return True

    return False

#-----

def Count( x, s ) :
    # The number of times that item 'x' occurs in sequence 's'
    # [ Python builtin: s.count( x ) ]

    count = 0
    for item in s :
        if item == x :
            count += 1 # same as: count = count + 1

    return count

#-----
```

```
>>> Print( "bread" )
b
r
e
a
d

>>> PrintWithNumbers( "bread" )
1 b
2 r
3 e
4 a
5 d

>>> Length( "bread" )
5

>>> Length( "floccipaucinihilipilification" )
29

>>> Length( "" )
0

>>> Occurs( "a", "bread" )
True

>>> Occurs( "A", "bread" )
False

>>> Occurs( "a", "" )
False

>>> Count( "i", "floccipaucinihilipilification" )
9

>>> Count( "z", "floccipaucinihilipilification" )
0

>>> Count( "z", "" )
0
```