

The 'range' Function

```
#-----
def CountUp( n ) :
    # Print the integers from 0 up to 'n-1'
    for i in range( n ) :
        print( i )
#-----

def CountDown( n ) :
    # Print the integers from 'n' down to 1, followed by "Lift-Off!"
    for i in range( n ) :
        print( n - i )
    print( "Lift-Off!" )
#-----

def CountFromTo( lo, hi ) :
    # Print the integers from 'lo' up to 'hi', inclusive
    for i in range( lo, hi + 1 ) :
        print( i )
#-----

def PrintSquares( lo, hi ) :
    # Print a table of the integers from 'lo' up to 'hi', inclusive,
    # and their squares
    for i in range( lo, hi + 1 ) :
        print( i, "*", i, "=", i * i )
#-----

def PrintPairs( lo1, hi1, lo2, hi2 ) :
    # Print all pairs of integers, where the first runs from 'lo1' up to 'hi1',
    # inclusive, and the second then runs from 'lo2' up to 'hi2', inclusive
    for i1 in range( lo1, hi1 + 1 ) :
        for i2 in range( lo2, hi2 + 1 ) :
            print( i1, i2 )
#-----
```

```
>>> CountUp( 6 )
0
1
2
3
4
5

>>> CountDown( 5 )
5
4
3
2
1
Lift-Off!

>>> CountFromTo( 3, 7 )
3
4
5
6
7

>>> PrintSquares( 4, 9 )
4 * 4 = 16
5 * 5 = 25
6 * 6 = 36
7 * 7 = 49
8 * 8 = 64
9 * 9 = 81

>>> PrintPairs( 1, 3, 7, 9 )
1 7
1 8
1 9
2 7
2 8
2 9
3 7
3 8
3 9
```