

## Indexing Sequences

```
#-----
def Print( s ) :
    # Print the items of the sequence 's', one per line [ see Handout #4 ]
    for i in range( len( s ) ) :
        print( s[ i ] )
```

```
#-----
def PrintReversed( s ) :
    # Print the items of the sequence 's', one per line, in reverse order
    lastindex = len( s ) - 1
    for i in range( len( s ) ) :
        print( s[ lastindex - i ] )
```

```
#-----
def IsSorted( s ) :
    # Is sequence 's' sorted in ascending order? [ see Handout #7 ]
    for i in range( len( s ) - 1 ) :
        if s[ i + 1 ] < s[ i ] :
            return False
    return True
```

```
#-----
def AddLists( numbers1, numbers2 ) :
    # The list formed by adding corresponding items
    # in numeric lists 'numbers1' and 'numbers2';
    # assume that both lists have the same number of items
    return [ numbers1[ i ] + numbers2[ i ] for i in range( len( numbers1 ) ) ]
```

```
#-----
def Rotate( lst, n ) :
    # A copy of list 'lst' rotated leftwards by 'n' items;
    # assume that 0 <= n <= len( lst ) - 1
    rotate = [ ]
    for i in range( n, len( lst ) ) :
        rotate += [ lst[ i ] ]
    for i in range( 0, n ) :
        rotate += [ lst[ i ] ]
    return rotate
```

```
#-----
```

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

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

```
>>> IsSorted( "abcdefg" )
True
```

```
>>> IsSorted( "aaaaaaa" )
True
```

```
>>> IsSorted( "abcedfg" )
False
```

```
>>> AddLists( [ 3, 1, 5 ], [ 2, 8, 2 ] )
[5, 9, 7]
```

```
>>> AddLists( [ ], [ ] )
[]
```

```
>>> Rotate( [ 5, 2, 7, 4, 1, 8 ], 3 )
[4, 1, 8, 5, 2, 7]
```

```
>>> Rotate( [ 5, 2, 7, 4, 1, 8 ], 0 )
[5, 2, 7, 4, 1, 8]
```

```
>>> Rotate( [ 5, 2, 7, 4, 1, 8 ], 5 )
[8, 5, 2, 7, 4, 1]
```