# List Slicing

Chapter 04d

### Getting a Sublist with Slices

#### **EXAMPLE:**

```
animals = ['cat', 'bat', 'rat', 'elephant']
```

print(animals[0:3])

#two integers, separated by colon

#1<sup>st</sup> number, index starts
#2<sup>nd</sup> number up to not including

### Assigning a Sublist to a new Variable

### **EXAMPLE:**

print(new list)

```
animals = ['cat', 'bat', 'rat', 'elephant']

#assigning sublist to new variable

new_list = animals[1:3]

#1st number, index starts

print(animal[1:3])

#2nd number up to not including
```

# Getting a Sublist with Slices

#### **MORE EXAMPLES:**

```
animals = ['cat', 'bat', 'rat', 'elephant']
new_list = animals[#:#]
new_list = animals[0:3]
new_list = animals[:3]
new_list = animals[0:]
```

#As a shortcut, you can leave out one or both index numbers.

[:#] Leaving out left index, is the same as starting at the beginning of the list.

[#:] Leaving out right index, is the same as slicing to the end of the list including the last item.

## Getting a Sublist with Slices

### MORE EXAMPLES:

```
animals = ['cat', 'bat', 'rat', 'elephant'] #OUTPUT
>>>animals[:2] ['cat', 'bat']
>>>animals[1:] ['bat', 'rat', 'elephant']
>>>animals[:] ['cat', 'bat', 'rat', 'elephant']
```