Sorting Lists

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Sorting Data in Place

Sort list in place

>>>fruit = [‘banana’, ‘apple’, ‘acai’, ‘cherry’, ‘figs’, ‘apple’, ‘dates’]

>>>fruit.sort ()

>>>fruit

[‘acai’, ‘apple’, ‘apple’, ‘banana’, ‘cherry’, ‘dates’, ‘figs’]

Creating a New Sorted List

```
# Leaves the original as is
>>>fruit = [‘banana’, ‘apple’, ‘acai’, ‘cherry’, ‘figs’, ‘apple’, ‘dates’]
>>>fruit_sorted = sorted (fruit)
>>>fruit_sorted
[‘acai’, ‘apple’, ‘apple’, ‘banana’, ‘cherry’, ‘dates’, ‘figs’]
>>>fruit
[‘banana’, ‘apple’, ‘acai’, ‘cherry’, ‘figs’, ‘apple’, ‘dates’]
```

Sorting by Different Attributes

Sort function parameter

- An element of the list
- Selects a key
- Nameless function (lambda)
- Select the element to sort by

```
# Using the NBAlist, let's sort by attendance
>>>newlist = sorted (NBAlist, key=lambda item: item[1])
>>>newlist                    # This is in ascending order
```

Sorting by Different Orders

Use the reverse function to determine ascending or descending

```
>>>newlist = sorted (NBAlist, key=lambda item: item[1], reverse=True)
>>>newlist                    # This is in descending order
```