



INTRO TO PYTHON FOR DATA SCIENCE

# Methods



# Built-in Functions

- Maximum of list: `max()`
- Length of list or string: `len()`
- Get index in list: ?
- Reversing a list: ?

# Back 2 Basics

	type	examples of methods
In [1]: sister = "liz"	Object <b>str</b>	<b>capitalize()</b> <b>replace()</b>
In [2]: height = 1.73	Object <b>float</b>	<b>bit_length()</b> <b>conjugate()</b>
In [3]: fam = ["liz", 1.73, "emma", 1.68, "mom", 1.71, "dad", 1.89]	Object <b>list</b>	<b>index()</b> <b>count()</b>

**Methods: Functions that belong to objects**



# list methods

```
In [4]: fam
```

```
Out[4]: ['liz', 1.73, 'emma', 1.68, 'mom', 1.71, 'dad', 1.89]
```

```
In [5]: fam.index("mom")
```

```
Out[5]: 4
```

**"Call method `index()` on `fam`"**

```
In [6]: fam.count(1.73)
```

```
Out[6]: 1
```



# str methods

```
In [7]: sister
```

```
Out[7]: 'liz'
```

```
In [8]: sister.capitalize()
```

```
Out[8]: 'Liz'
```

```
In [9]: sister.replace("z", "sa")
```

```
Out[9]: 'lisa'
```



# Methods

- Everything = object
- Object have methods associated, depending on type

```
In [10]: sister.replace("z", "sa")
Out[10]: 'lisa'
```

```
In [11]: fam.replace("mom", "mommy")
AttributeError: 'list' object has no attribute 'replace'
```

```
In [12]: sister.index("z")
Out[12]: 2
```

```
In [13]: fam.index("mom")
Out[13]: 4
```



# Methods (2)

```
In [14]: fam  
Out[14]: ['liz', 1.73, 'emma', 1.68, 'mom', 1.71, 'dad', 1.89]
```



```
In [15]: fam.append("me")
```

```
In [16]: fam  
Out[16]: ['liz', 1.73, 'emma', 1.68, 'mom', 1.71, 'dad', 1.89, 'me']
```

```
In [17]: fam.append(1.79)
```

```
In [18]: fam  
Out[18]: ['liz', 1.73, 'emma', 1.68, 'mom', 1.71, 'dad', 1.89, 'me', 1.79]
```

# Summary

- Functions

```
In [11]: type(fam)
Out[11]: list
```

- Methods: call functions *on* objects

```
In [12]: fam.index("dad")
Out[12]: 6
```





INTRO TO PYTHON FOR DATA SCIENCE

**Let's practice!**