



Methods

Modules

- ▶ Collections of related functions
- ▶ The math module contains standard mathematical functions
 - ▶ sqrt, cos, sin, log...
- ▶ The string module contains standard string functions
 - ▶ capitalize, swapcase, find...



Objects and Methods

- ▶ Objects of particular types also carry around their own functions, called methods
- ▶ Instead of doing something to *any* object they do it to the object they are attached to
- ▶ Calling methods
 - ▶ `object.method()`



String methods - Examples

```
>>> 'attattat'.upper()  
'ATTATTAT'
```

```
>>> 'attattat'.replace('t', 'T')  
'aTTaTTa'
```

```
>>> 'attattat'.endswith('at')  
TRUE
```

```
>>> 'attattat'.endswith('ta')  
FALSE
```



String methods - Examples

```
>>> seq = 'attattat'
```

```
>>> seq.upper()
```

```
'ATTATTAT'
```

```
>>> seq
```

```
'attatta'
```

```
>>> cap_seq = seq.upper()
```

```
>>> cap_seq
```

```
'ATTATTAT'
```



String methods - Examples

```
>>> dna = 'gcatgacg'
```

```
>>> dna.count('a')
```

```
2
```

```
>>> dna.count('at')
```

```
1
```



Getting help for methods

- ▶ **help(str)**

- ▶ Lists all methods

- ▶ **help(str.method)**

- ▶ Lists the help for a particular method

- ▶ e.g.,

```
>>> help(str.endswith)
```

- ▶ **Or, you can always use Google**

