

Non-scalar objects

- We will see many different kinds of compound objects
- The simplest of these are strings, objects of type `str`
- Literals of type string can be written using single or double quotes
 - `'abc'`
 - `"abc"`
 - `'123'` – this is a string of characters, not the number

Operators on strings

```
>>> 3 * 'a'
```

```
'aaa'
```

```
>>> 'a' + 'a'
```

```
'aa'
```

```
>>> 'a' + str(3)
```

```
'a3'
```

```
>>> len('abc')
```

```
3
```

Operator overloading

Extracting parts of strings

- Indexing:
 - `'abc'[0]` returns the string `'a'`
 - `'abc'[2]` returns the string `'c'`
 - `'abc'[3]` is an error (as we cannot go beyond the boundaries of the string)
 - `'abc'[-1]` returns the string `'c'` (essentially counting backwards from the start of the string)
- Slicing:
 - If `s` is a string, the expression `s[start:end]` denotes the substring that starts at `start`, and ends at `end-1`
 - `'abc'[1:3]` has the value `'bc'`