\[ x = \text{"box"} \]
\[ x[2] = \text{t} \]  \quad \text{error}
\[ \text{print}(x) \]

- `str` — collection of characters  \quad \text{immutable}
- `range` — collection of `int`  \quad \text{immutable}
- `tuple` — collection of anything  \quad \text{immutable}
- `list` — collection of anything  \quad \text{mutable}

\[
\begin{align*}
\{i\} \\
\{i, i+1\} \\
\{i : i+2 : \text{step}\}
\end{align*}
\]

- `range(3, 8)` \rightarrow \{3, 4, 5, 6, 7\}
- `range(4)` \rightarrow \{0, 1, 2, 3\}
- `range(3, 8, 2)` \rightarrow \{3, 5, 7\}
list method

```python
l.append(e)  \rightarrow l \ \text{get 1 longer, last item is now e}
```

```python
l = [1, 3, 2]
l.append('hi')  \# l is now [1, 3, 2, 'hi']
```

```python
l.pop(index) \rightarrow \text{make l 1 shorter}
l.remove(value)
```