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# `collection`#
Common collection classes.
## Classes#
`AttrDict` | Sub-classes dict, and further allows attribute-like access to dictionary items.
---|---
## Functions#
`make_immutable`(value) |
---|---
`first`(seq[, key, default, apply]) | Give the first value that satisfies the key test.
`last`(seq[, key, default, apply]) |
make_immutable(_value_)#
```

* [` cli`](../../conda_env/cli/index.html)

```
_class _AttrDict(_* args_, _** kwargs_)#
```

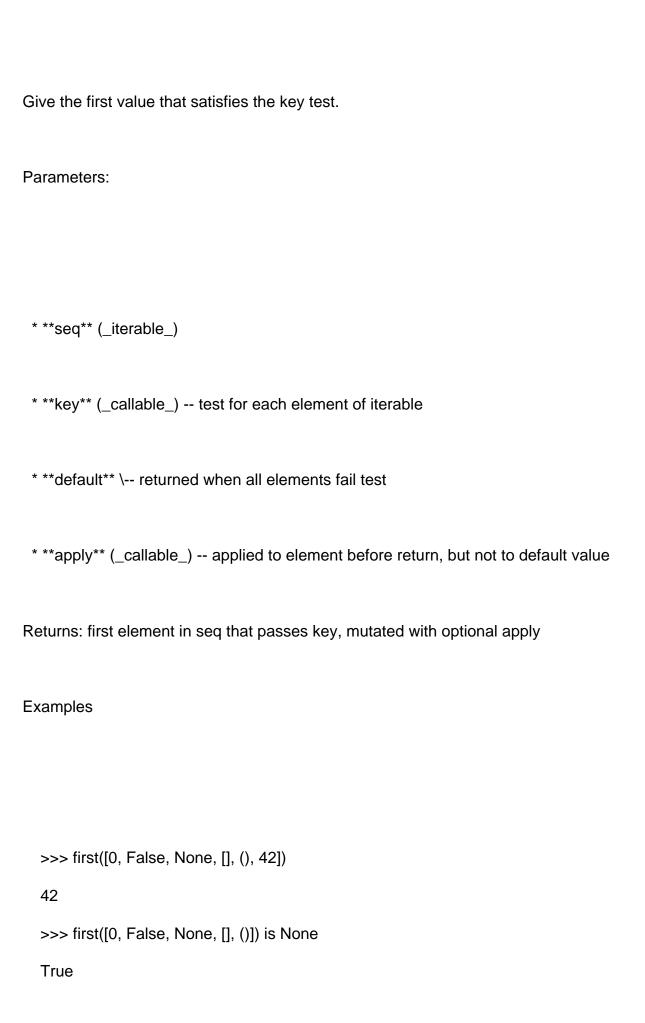
Bases: [`dict`](https://docs.python.org/3/library/stdtypes.html#dict "\(in Python v3.13\)")

Sub-classes dict, and further allows attribute-like access to dictionary items.

Examples

```
>>> d = AttrDict({'a': 1})
>>> d.a, d['a'], d.get('a')
(1, 1, 1)
>>> d.b = 2
>>> d.b, d['b']
(2, 2)
```

Initialize self. See help(type(self)) for accurate signature.



```
>>> first([0, False, None, [], ()], default='ohai')
'ohai'
>>> import re
>>> m = first(re.match(regex, 'abc') for regex in ['b.*', 'a(.*)'])
>>> m.group(1)
'bc'
```

The optional key argument specifies a one-argument predicate function like that used for filter(). The key argument, if supplied, must be in keyword form. For example: >>> first([1, 1, 3, 4, 5], key=lambda x: x % 2 == 0) 4

```
last(_seq_ , _key =bool_, _default =None_, _apply =lambda x: ..._)#
```

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- * `make_immutable()`
- * `AttrDict`
- * `first()`
- * `last()`

[__Edit on GitHub](https://github.com/conda/conda/edit/main/docs/source/devguide/api/conda/auxlib/collection/index.rst)

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guide/api/conda/auxlib/collection/index.rst.txt)
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[Analytics Dashboard](https://docs-conda-io.goatcounter.com "Analytics
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theme.readthedocs.io/en/stable/index.html) 0.15.4.