

Ways to create a Dictionary

Ways to Pass Values to `dict()`

The `dict()` constructor in Python allows multiple ways to create a dictionary:

1. Using key-value pairs inside a list of tuples (as in your example)

```
d1 = dict([('sape', 4139), ('guido', 4127), ('jack', 4098)])
```

2. Using keyword arguments (keys as variable names, values as assigned values)

```
d2 = dict(sape=4139, guido=4127, jack=4098)
```

3. Using an iterable of key-value pairs (like a tuple generator)

```
d3 = dict(zip(['sape', 'guido', 'jack'], [4139, 4127, 4098]))
```

4. Using another dictionary (copying from an existing dictionary)

```
d4 = dict({'sape': 4139, 'guido': 4127, 'jack': 4098})
```

5. Using dictionary comprehension

```
d5 = {k: v for k, v in [('sape', 4139), ('guido', 4127), ('jack', 4098)]}
```

All these methods produce the same dictionary:

```
{'sape': 4139, 'guido': 4127, 'jack': 4098}
```