

Mastering Comprehensions

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Textualize
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What's a
(list) comprehension?

Extract
important
parts.

```
...  
squares = []  
for num in range(10):  
    squares.append(num ** 2)
```

```
squares = [num ** 2 for num in range(10)]
```

Filtering data

```
odd_squares = [  
    num ** 2 <  
    for num in range(10) <=>  
    if num % 2  
]
```

```
odd_squares = []  
for num in range(10):  
    if num % 2:  
        odd_squares.append(num ** 2)
```



<https://github.com/mathsppt/comprehending-comprehensions>

Set comprehensions



```
new_set = {  
    func(element)  
    for element in iterable  
    if predicate(element)  
}
```

Dictionary comprehensions



```
new_dict = {  
    fk(key): fv(value)  
    for key, value in iterable  
    if predicate(key, value)  
}
```

Generator expressions



```
new_list = (  
    func(element)  
    for element in iterable  
    if predicate(element)  
)
```



+250 exercises
solutions
more idioms
good & bad use cases



```
# Workshop ended, collect reactions.  
reactions = [  
    member.applaud()  
    for member in audience  
    if not member.sleeping()  
]
```

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