

List Comprehension

```
nums = [1, 2, 3, 4]
```

```
squares = [ n * n for n in nums ]
```

```
## [1, 4, 9, 16]
```

```
strs = ['hello', 'and', 'goodbye']
```

```
shouting = [ s.upper() + '!!!' for s in strs ]
```

```
## ['HELLO!!!', 'AND!!!', 'GOODBYE!!!']
```

```
## Select values <= 2
```

```
nums = [2, 8, 1, 6]
```

```
small = [ n for n in nums if n <= 2 ]
```

```
## [2, 1]
```

```
## Select fruits containing 'a', change to upper
```

```
## case
```

```
fruits = ['apple', 'cherry', 'banana', 'lemon']
```

```
afruits = [ s.upper() for s in fruits if 'a' in s ]
```

```
## ['APPLE', 'BANANA']
```