Learn by **example**

Python List Comprehension

A comprehension is a compact way of creating a Python data structure from iterators. With comprehensions, you can combine loops and conditional tests with a less verbose syntax.

Comprehension is considered more **Pythonic** and often useful in a variety of scenarios.

What is List Comprehension?

List comprehension sounds complex but it really isn't.

List comprehension is a way to build a new list by applying an expression to each item in an iterable.

It saves you having to write several lines of code, and keeps the readability of your code neat.

Basic Example

Suppose you want to create a list of all integer square numbers from 0 to 4. You could build that list by appending one item at a time to an empty list: