#### Introduction

PEP 380 -Syntax for Delegating to a Subgenerator

## The purpose of Generators in Python

Return returns the entire output at once. Yield, which is typically used by generators, yields only one iteration at a time

#### Weakness with Yield and Generators

A drawback to yield is that when yield is used in a function, it can only yield back to one caller

## Proposal

"" 'python yield from expr' ""

## Proposal (cont.)

"" 'python RESULT = yield from EXPR'"

#### Comparisons

""'python i = iter(EXPR) try: y = next(i) except StopIteration as e: r = e.value else: while 1: try: s = yield y except GeneratorExit as e: try: m = i.close except AttributeError: pass else: m() raise e except BaseException as e: x = sys.excinfo() try: m = i.throw except AttributeError: raise e else: try:  $y = _m(*x)$  except StopIteration as e: r = e.value break else: try: if s is None: y = next(i) else: y = i.send(s) except StopIteration as e: r = e.value break RESULT = r""

#### Syntax

With the new syntax, we can now move around the code with yield in it to a greater degree, making it easier for us to reuse it

# Eighth

# Ninth

## Tenth

#### Eleventh