PEP 572 - Assignment Expressions

@tirkarthi

Read from resource (file/socket)

```python
while True:
    data = resource.read(100) # Read 100 bytes

    if not data:
        break

    process(data)
```

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- New operator := (Unnamed yet)

- Use assignment expressions in boolean context

```python
while (data := resource.read(100)):
    process(data)
```

Get something from map

```python
value = map.get("foo") # Can return 0

if value is not None:
    do_something(value)
```

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```python
if (value := map.get("foo")) is not None:
    do_something(value)
```

Regex matching

```python
pattern = re.compile(r'(\d+)')
match = pattern.match(data)

if match:
    result = match.group(1)
```

```python
pattern = re.compile(r'(\d+)')

if (match := pattern.match(data)):
    result = match.group(1)
```

List comprehensions

```
[square(n) for n in range(1, 10) if square(n) / 2 == 0]
```

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```
[res for n in range(1, 10) if (res := square(n)) / 2 == 0
```

Discussions and implementations

- Porting stdlib to PEP 572 by Victor Stinner
- PEP 572 implementation

Python after PEP 572

- Moving to a different governance model.
- No major development till January 2019.
- Disagree but be kind.

Thanks Guido

Brett Cannon
@brettsky
Following

I owe my career to @gvanrossum and the Python development team. If it wasn't for the language Guido designed and the team around the language I would not be nearly as knowledgeable in my profession as I am. #ThanksGuido

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