

## **Long lines that concatenate list comprehensions #4353 Report**

### **Change Request Summary**

#### **Issue 1: Formatting of Concatenated List Comprehensions**

Change the formatting logic in context of concatenated list. Format list for parentheses and ensure each comprehension remains on its own line.

#### **Steps Taken**

- Change the formatting logic in context of concatenated list. Format list for parentheses and ensure each comprehension remains on its own line.
- Issue Discovery and Research Issue 4353 suggests; Concatenated list comprehensions should be put one-per-line rather than splitting within a comprehension.
- Codebase Analysis & Fix Implementation Analyzed the existing logic responsible for concatenated list formatting.
- Created a new test case for the expected output:
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#### **Techniques & Tools Used**

GitHub & Git for version control.

Pytest for testing.

Black's codebase,

Black playground for formatting checks.

VS Code

#### **Testing & Verification**

Testing Created a new test case for the expected output: assured list concatenation was formatted better.

Input code (before formatting)

```
code_before = matching_routes = [r for r in routes if r.get("dst") and ip in  
ipaddress.ip_network(r.get("dst"))] + [ r for r in routes if r.get("dst") == "" and r.get("family")  
== family ]
```

Expected output after formatting

```
code_after = matching_routes = ( [r for r in routes if r.get("dst") and ip in  
ipaddress.ip_network(r.get("dst"))] + [r for r in routes if r.get("dst") == "" and r.get("family")  
== family] )
```

### **Outcome Analysis and Expectations**

- Users will experience better formatting of concatenated list when programming with black formatter enabled. Leading to better clarity and time management; of time spent correcting code comprehension.

### **Link**

[https://github.com/WSU-CptS-581-2025/black\\_code\\_formatter/tree/list-comprehension-formatting](https://github.com/WSU-CptS-581-2025/black_code_formatter/tree/list-comprehension-formatting)