Why Functional Programming?

Why avoid objects and side effects?

Formal Provability Line-by-line invariants

Modularity Encourages small independent functions

Composability Arrange existing functions for new goals

Easy Debugging Behavior depends only on input

Let's Get Started!

```
[len(s) for s in languages]
"python", "perl", "java", "c++"
      map (len, languages)
< 6 , 4 , 3>
```