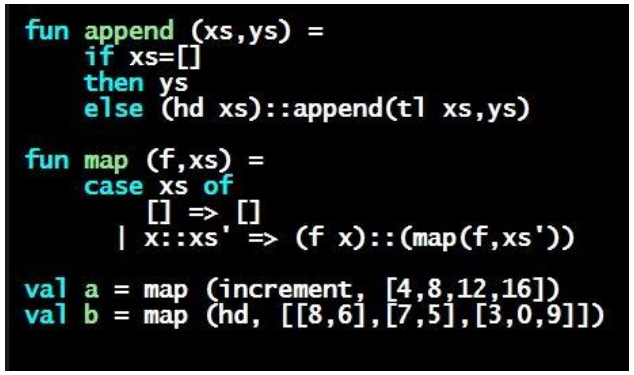

Programming Languages

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2013

Optional: Closure Idioms Without Closures

Higher-order programming

- Higher-order programming, e.g., with **`map`** and **`filter`**, is great
- Language support for closures makes it very pleasant
- Without closures, we can still do it more manually / clumsily
  - In OOP (e.g., Java) with one-method interfaces
  - In procedural (e.g., C) with explicit environment arguments
- Working through this:
  - Shows connections between languages and features
  - Can help you understand closures and objects

Outline

This segment:

- Just the code we will “port” to Java and/or C
- Not using standard library to provide fuller comparison

Next segments:

- The code in Java and/or C
- What works well and what is painful