

CSE111A - lecture 9

- code walks! Sign up if you haven't.
 - continue with higher-order functions
 - last time: filter and map
 - this time: fold functions (foldr and foldl)
 - if time: toy MapReduce framework
-

Partial application

If we have a function of type, say,

$\text{Int} \rightarrow \text{Int} \rightarrow \text{Int}$

This might look like a function that takes two Int arguments and returns an Int .

But really, under the hood, its type is

$\text{Int} \rightarrow (\text{Int} \rightarrow \text{Int})$

In general, a signature

$a \rightarrow b \rightarrow c \rightarrow d$

is syntactic sugar for

$a \rightarrow (b \rightarrow (c \rightarrow d))$

$\text{map } (\lambda x y z \rightarrow x) \text{ ["apple", "kumquat", "pear"]}$