

CSE 341, Higher Order Functions
April 16, 2014

Programmer 1 : _____

Programmer 2 : _____

Programmer 3 : _____

Programmer 4 : _____

(A) With your group, write a function `foldl` of type:

$$(\alpha \rightarrow \beta \rightarrow \beta) \rightarrow \alpha \text{ list} \rightarrow \beta \rightarrow \beta$$

such that `foldl f [x1, ..., xN] b = f xN (... (f x1 b) ...)`. *Hint: foldl is easier to write tail-recursively!*

(B) With your group, use `foldl` to implement `map`:

(C) With your group, use `foldl` to implement the version of `fold` we saw in class. Recall that, in class, `fold f [x1, ..., xN] b = f x1 (... (f xN b) ...)`.