in-class problem

eecs 368 programming language paradigms

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```
{-
 - in-class problem
 -
 - the fibonacci sequence starts with 0 and 1, with each further number
being the sum of the previous two:
 - 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, ...
 - using a list comprehension, define an expression that generates this
infinite sequence
 - fibs :: [Integer]
 -
 - note:  use the library functions zip and tail
 -
 - zip produces a list of pairs from a pair of lists
 - zip :: [a] -> [b] -> [(a,b)]
 -
 - tail removes the first element from a non-empty list
 - tail :: [a] -> [a]
 - tail (_:xs) = xs
 -}

fibs :: [Integer]
fibs = 0 : 1 : zipWith (+) fibs (tail fibs)
```