

Challenge

Spare Time Teaching

January 28, 2014

You may not add parameters or change the output.
Inspired by Olivier Danvy and Mayer Goldberg.

Problem

Write a function that, given two lists $(x_1 \ x_2 \ \dots \ x_{n-1} \ x_n)$ and $(y_1 \ y_2 \ \dots \ y_{n-1} \ y_n)$, constructs $((x_1 \ . \ y_n) \ (x_2 \ . \ y_{n-1}) \ \dots \ (x_{n-1} \ . \ y_2) \ (x_n \ . \ y_1))$ in n recursive calls and with no auxiliary list.

Example

```
> (ch '(1 2 3) '(a b c))  
((1 . c) (2 . b) (3 . a))
```