For positive integer \( n \), a diminished-\( J \)-list of order \( n \) is a list of \( 2n-1 \) naturals in which 0 occurs once and each \( m, 1 \leq m \leq n \) occurs twice, and between the two occurrences of \( m \) there are \( m \) items.

(a) Write a program that creates a diminished-\( J \)-list of order \( n \) if there is one, for given \( n \).

(b) For which \( n \) do diminished-\( J \)-lists exist?

no solution given