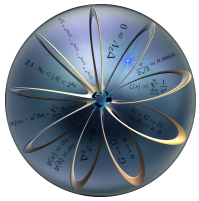

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interleave sequence

Canonical name	InterleaveSequence
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Let S be a set, and let $\{x_i\},\ i = 0, 1, 2, \ldots$ and $\{y_i\},\ i = 0, 1, 2, \ldots$ be two sequences in S. The *interleave sequence* is defined to be the sequence $x_0, y_0, x_1, y_1, \ldots$. Formally, it is the sequence $\{z_i\},\ i = 0, 1, 2, \ldots$ given by

$$z_i := \begin{cases} x_k & \text{if } i = 2k \text{ is even,} \\ y_k & \text{if } i = 2k + 1 \text{ is odd.} \end{cases}$$