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Abstract

For *n* a positive integer, a subset *S* of $[n] (= \{1, 2, 3, ..., n\})$ is called *extraordinary* if |S| is equal to the smallest element of *S*. The number of such subsets *S*, for a given *n*, is counted by F_n , the *n*th Fibonacci number.

For positive integers k, n, where $1 < k \leq n$, we now investigate those subsets S of [n], where |S| is equal to the kth smallest element of S. We call such subsets S k-extraordinary.