

Bilkent University Department of Mathematics

PROBLEM OF THE MONTH

Term: May 2014

The sequence of positive integers a_1, \ldots, a_{2014} is said to be *good*, if the following three conditions are held:

- $a_i \le 2014$
- $a_i \neq a_j$ for all $i \neq j$ $a_i + i \leq a_j + j$ for all i < j

Find the total number of good sequences.