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On locally repeated values of certain arithmetic functions. I. (In English)

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It is shown that, for certain integer-valued arithmetic functions f, the equation $n + f(n) = m + f(m)$ has infinitely many solutions with $n \neq m$. Let $\nu(n)$ denote the number of distinct prime factors of n. Then, for $f = \nu$, a lower bound for the number of solutions $n, m \leq x$ is given.

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