Picture At ITP - Sequence A078567

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Formula for the number of arithmetic subsequences of $[1..n]$ with length > 1.
if $n = 3$ we have $(123),(12),(13),(23)$, so $a(3) = 4$
if $n = 4$, we have $(1234),(12),(13),(14),(23),(24),(123),(234),(34)$, so $a(4) = 9$
Sequence goes:
$0, 1, 4, 9, 17, 27, 41, 57, 77, 100, 127, \ldots$

$$a(n+1) = \lfloor \sqrt{n} \rfloor^2 \left(\frac{(1 + \lfloor \sqrt{n} \rfloor)^2}{4} - n - 1 \right) + \sum_{i=1}^{\lfloor \sqrt{n} \rfloor} \left\lfloor \frac{n}{i} \right\rfloor \left[2n + 2 - i \left(1 + \left\lfloor \frac{n}{i} \right\rfloor \right) \right]$$