$$\Delta(1) = 1, \quad \Delta(10) = 11, \quad \Delta(110) = 10101, \quad \Delta(10101) = 11100111,$$

$$\Delta(11001) = 101000101, \quad \Delta(101010) = 1110000111\ .$$

No infinite sequence of palindromic triangular numbers has been found in base ten [4] or in other even bases > two.

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A NOTE ON THE FERMAT - PELLIAN EQUATION $x^2 - 2y^2 = 1$

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It is a well known fact that $3 + 2\sqrt{2}$ is the fundamental solution of the Fermat-Pellian equation $x^2 - 2y^2 = 1$. Hence, if $u + v\sqrt{2}$ is any other solution then there exists an integer n such that $u + v\sqrt{2} = (3 + 2\sqrt{2})^n$. Let $T = (a_{ij})$ be the 3-by-3 matrix where $a_{12} = a_{21} = 1$, $a_{33} = 3$, and $a_{ij} = 2$ for all other values. It is interesting to observe that there exists a relationship between the integral powers of T and $3 + 2\sqrt{2}$. In fact, a necessary and sufficient condition for $M = T^n$ is that $M = (b_{ij})$ with $b_{33} = 2m + 1$, $b_{12} = b_{21} = m$, $b_{11} = b_{22} = m + 1$ and $b_{13} = b_{23} = b_{31} = b_{32} = v$, where $(2m + 1)^2 - 2v^2 = 1$. If $n \geq 0$ both the necessary and sufficient condition follow by induction. Using this fact, it then follows for $n < 0$.