Axler 7.B exercise 8 June 1, 2021

Give an example of an operator T on a complex vector space s.t. $T^9=T^8$ but $T^2\neq T$.

As opposed to a normal operator.

Let $T \in \mathcal{L}(\mathbb{C}^3)$ defined by

$$T(x, y, z) = (y, z, 0)$$