Chapter 6 (Cont.):

- Do the Calculational Exercises: 4 and 6 (page 82-83).

- Let $V$ be a vector space and $T \in \mathcal{L}(V)$. Prove that $T^2 = 0$ if and only if $\text{range}(T) \subseteq \text{null}(T)$.

- Let $V, W$ be two vector spaces over a field and $T, S : V \to W$ are linear maps. Prove that $\text{range}(T + S) \subseteq \text{range}(T) + \text{range}(S)$.