Elements in a ring which can be represented as a sum of idempotents and one nilpotent element

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The conditions that allow an element of an associative, unital, not necessarily commutative ring R, to be represented as a sum of (commuting) idempotents and one nilpotent element are analyzed. An element a of a ring R is s-nil-clean if it can be written in the following form:

$$a = e_1 + \cdots + e_s + n,$$

where elements $e_1, \ldots, e_s$ are idempotents and n is nilpotent. If an element a can be written in this form so that elements in this sum are pairwise commutative, we say that this element is strongly s-nil-clean. If every element in R is (strongly) s-nil clean, we say that R is a (strongly) s-nil-clean ring. We examine some interesting properties of s-nil clean rings.