

## A Study on Wedderburn - Artin Theorem for Rings

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**Abstract :** The study depicts that a Wedderburn Artin - theorem for rings is considered to be a semisimple ring  $R$  which is isomorphic to a product of finitely many  $m_i$  by  $m_i$  matrix rings over division rings  $D_i$ , for some integers  $n_i$ , both of which are uniquely determined up to permutation of the index  $i$ . It has been concluded that when  $R$  is simple the Wedderburn - Artin theorem is known as Wedderburn's theorem.

**Keywords :** Commutativity, Wedderburn theorem, Semisimple ring,  $R$  module

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