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**Title:** Product closed modules need not be artinian

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A module  $M$  is called *product closed* if every hereditary pretorsion class in  $\sigma[M]$  is closed under products in  $\sigma[M]$ . It is known that if  $M$  is product closed, finitely generated, projective in  $\sigma[M]$  and is such that every hereditary pretorsion class in  $\sigma[M]$  is  $M$ -dominated, then  $M$  has finite length. In this paper a module  $M$  is constructed which is product closed, finitely generated and projective but which is not artinian.

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