Abstract. The $(0, 1)$-matrix $A$ of order $n$ is a tournament matrix provided
\[ A + A^T + I = J, \]
where $I$ is the identity matrix, and $J = J_n$ is the all 1’s matrix of order $n$. It was shown by de Caen and Michael that the rank of a tournament matrix $A$ of order $n$ over a field of characteristic $p$ satisfies $\text{rank}_p(A) \geq (n - 1)/2$ with equality if and only if $n$ is odd and $AA^T = O$. This article shows that the rank of a tournament matrix $A$ of even order $n$ over a field of characteristic $p$ satisfies $\text{rank}_p(A) \geq n/2$ with equality if and only if after simultaneous row and column permutations
\[ AA^T = \begin{bmatrix} \pm m & O \\ O & O \end{bmatrix}, \]
for a suitable integer $m$. The results and constructions for even order tournament matrices are related to and shed light on tournament matrices of odd order with minimum rank.

Key words. Tournament matrix, Rank.

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