

On the Most Commonly-Occurring Score Vectors of American Tournaments of n-players, and their Corresponding Records

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[article\(.txt\)](#)

(Exclusively published in the Personal Journal of Shalosh B. Ekhad and Doron Zeilberger)

First Written: June 13, 2016 This Version: July 26, 2016.

In his beautiful article, "An American Tournament Treated by the Calculus of Symmetric Functions" Quarterly J. of Pure and Applied Mathematics. vol. XLIX, No. 193, 1920, The combinatorial giant, (and amazing human calculator), Major Percy Alexander MacMahon, considered round-robin tournaments for n players for n from 2 to 9, and for each found all the possible score vectors, and determined the most popular one, as well as the number of times it shows up. In this article, we continue this work up to $n=15$, and thereby continue [OEIS sequence A274098](#).

Maple Packages

- [PERCY.txt](#)

- [PERCYG.txt](#) (a generalized version of the above)
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Sample Input and Output Files for the Maple package PERCY.txt

- This article was produced by running the [input file](#), yielding [output file](#) (i.e. the above article).
- This took quite a while, but in 9 seconds, we get 12 terms:
[input file](#), yielding [output file](#)

- It only takes 0.1 seconds to reproduce Macmahon's original values, up to $n=9$ [input file](#), yielding [output file](#)
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Sample Input and Output Files for the Maple package PERCYG.txt

- To get a more detailed article, in the style of MacMahon [input file](#), yields [output file](#)
- To get the Chess analog [input file](#), yields [output file](#)

- **To get the Soccer analog**
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