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Dear Doron,

I very much enjoyed reading the intro to your submission of today!

I have one comment: in addition to asking Persi Diaconis, it may be useful to visit www.findstat.org.

More precisely, go to

www.findstat.org/StatisticFinder?Domain=Permutations

and enter the values of your permutation statistic for a few small permutations.

If you prefer, you can also click on the very small ‘all-at-once’ tab near the top, and copy-paste element-value pairs from your favorite computer algebra system. Unfortunately, due to extremely limited funding, there is no AI in the background which converts your input to the standard input format of `FindStat`. However, the syntax should not be hard to understand. In the case at hand, you could enter the following:

```
[1,2] => 0
[2,1] => 2
[1,2,3] => 0
[1,3,2] => 2
[2,1,3] => 2
[2,3,1] => 4
[3,1,2] => 4
[3,2,1] => 4
[4,2,3,1] => 6
[3,2,1,4,5] => 4
[4,3,5,1,2] => 12
```

After clicking the search button, `FindStat` will answer with very many hits (because we gave it so few values), the first hit is www.findstat.org/St000830.

You may also enjoy following the link to www.findstat.org/St000029 and there to the www.oeis.org (‘click to show known generating functions’).

Besides, Thomas Kahle and Christian Stump have used `FindStat` in the appendix of <https://arxiv.org/abs/1802.01389> to automate the search for statistics with nice statistics, i.e., mean values and variances, and central limit theorems!

Best wishes,

Martin