

foo

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May 19, 2022

1 Introduction

1.1 Number of derangements with k good swaps

2 Deterministic Algorithm

2.1 Case where array has k unique values

3 Probabilistic Algorithm

3.1 $n/2$ and $n/8$ bounds

3.2 $n/4$ bound - show derivation of p1 and p2 but explain why recurrence is naive

3.3 swaps within derangements of size n lead to stable distribution - degree argument

degree is $\binom{n}{2} - n + l_2$

4 Adversary

4.1 describing the adversary

4.2 implementation

4.3 n^2 lower bound