Educational Magic Tricks Based on Error-Detection Schemes

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Overview

- Magic is a great way to engage students. Tricks to be demonstrated here have gotten positive responses (limited data so far).
- These tricks utilize many ideas from computer science and discrete mathematics, e.g., XOR, parity, pigeonhole principle, permutations, information theory, modular arithmetic, etc. Furthermore, they can motivate probability and computational complexity analyses.

Implementation

HTML and JavaScript can run in any browser without access to internet; download will be available at

http://rig.cs.luc.edu/~rig/errdetectmagic

and later in the Loyola University of Chicago eCommons.