Error Detection - Card Flip Magic

The world is noisy place, and errors can occur whenever information is stored or transmitted. Error detection techniques add extra parity bits to data to determine when errors have occurred.

This activity is a magic trick which most audiences find intriguing. In the trick the demonstrator is “magically” able to figure which one out of dozens of cards has been turned over, using the same methods that computers use to figure out if an error has occurred in data storage.