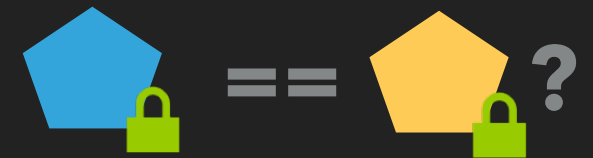


COMPARE DATA



Problem: Securely compare two data items

Solution: Normalise & hash data, compare hashes

1 - Normalize

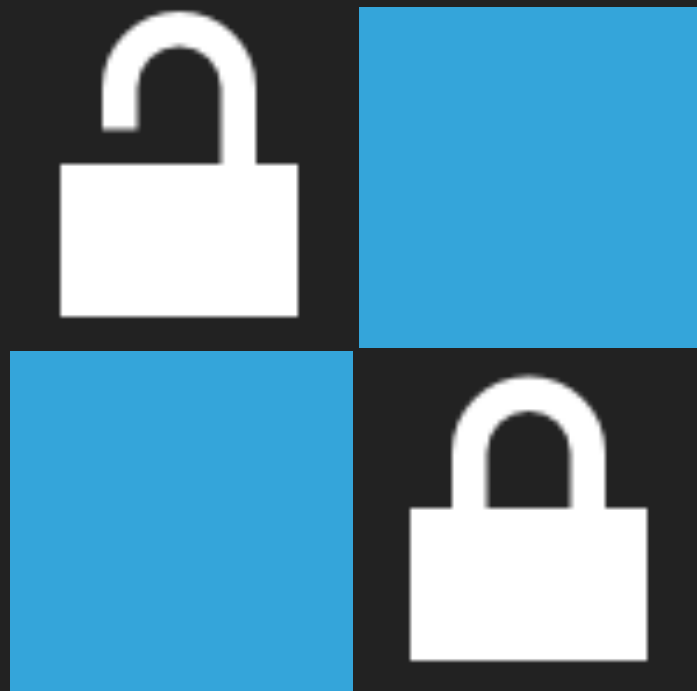
E.g. **J. EDGAR HOOVER** \Rightarrow **HOOVER, JOHN EDGAR** \Rightarrow^* **H160, J500 E326**

2 - Hash

Use *hash(salt + data)* to prevent precomputing attacks. Use multiple iterations of hashing.

- ▶ *public salt* \Rightarrow treat hash as *pseudonymised*
- ▶ *secret salt* \Rightarrow treat hash as *anonymised*

* *Soundex* - but choose whatever normalisation works for you



PATTERNS

**TRANSPARENT
ENCRYPTION**