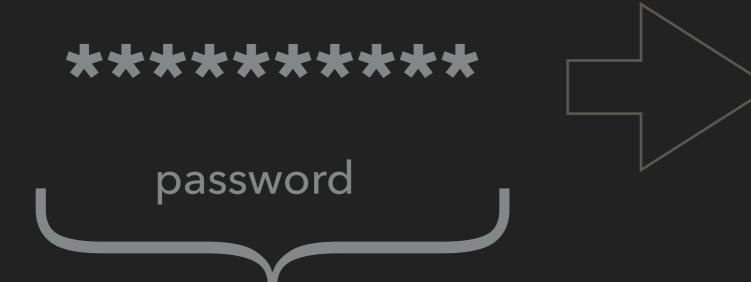
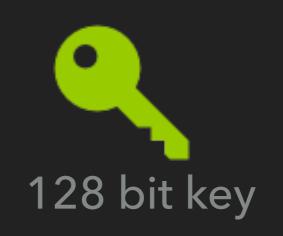
## FROM PASSWORD TO KEY







aw92SDAVglkqusabvgw38

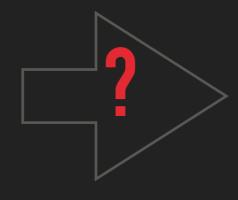


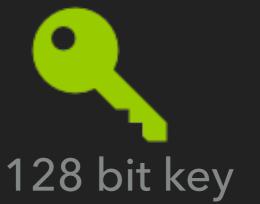
- ▶ 128 bit
- > 3o8uGsdA
  - 8 chars, 48 bit (cracked in hours to days)

## FROM PASSWORD TO KEY









password

- Key derivation functions (KDF) convert passwords to keys
- For good (21+ chars) passwords use HKDF (RFC5869)
- Else: use a KDF with brute force protection (\*)
  - SCRYPT (<u>RFC7914</u>)
  - ▶ PBKDF2 (<u>RFC2898</u>)