

# CSS322 – Cryptographic Hash Functions Notes

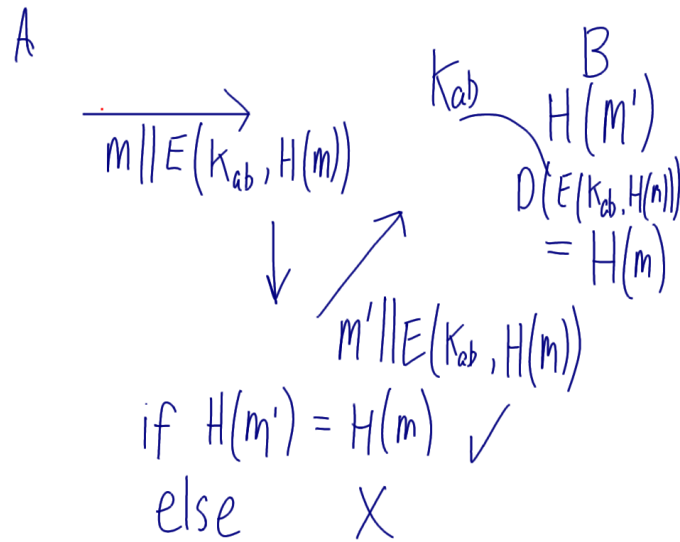


Figure 1: Attack on Hash for Authentication: Change M; Lecture 15

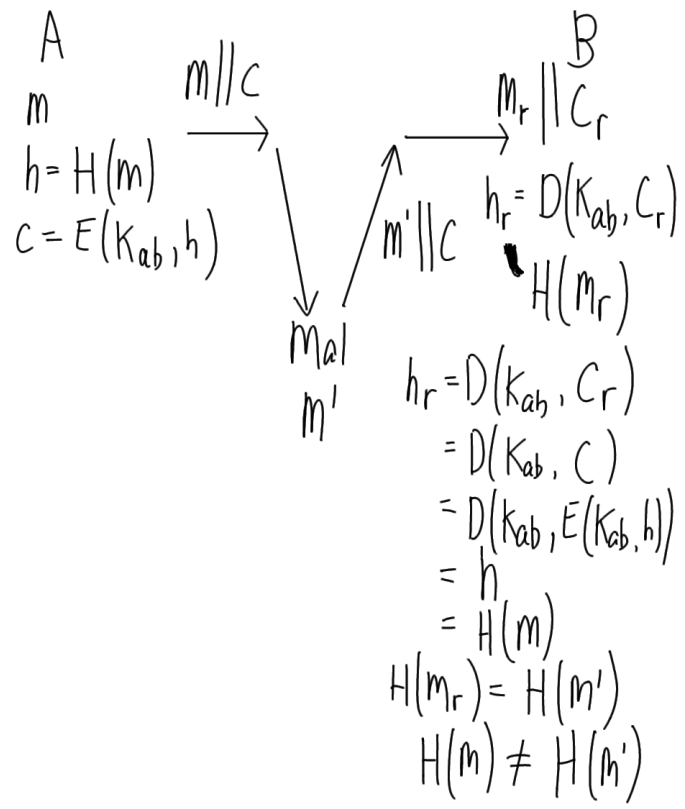


Figure 2: Attack on Hash Authentication with Symmetric Key: Change M; Lecture 16

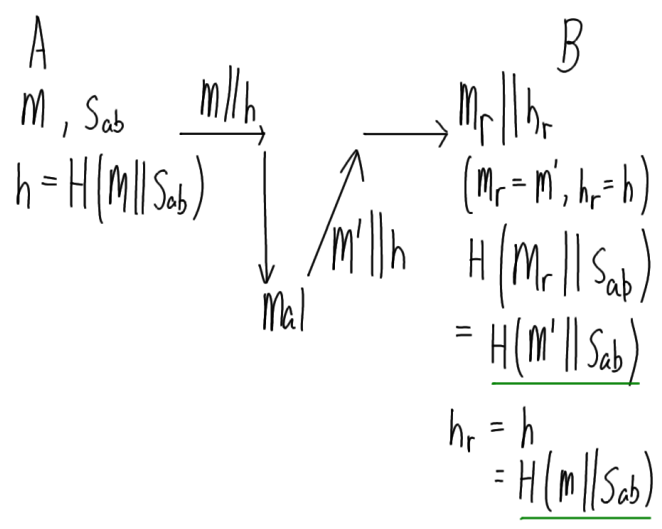


Figure 3: Attack on Hash Authentication with Secret: Change M; Lecture 16

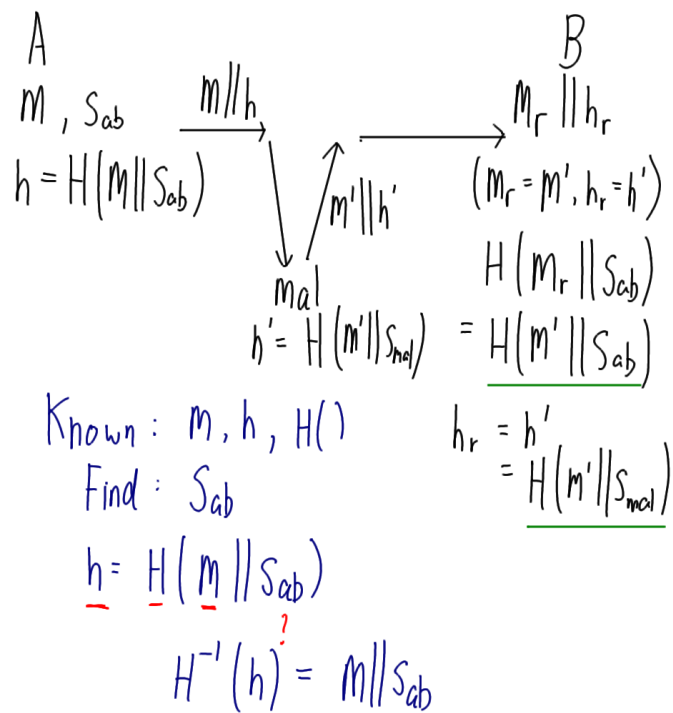


Figure 4: Attack on Hash Authentication with Secret: Change M and h; Lecture 16

$$h = H(m)$$

$$T = \text{MAC}(K, m)$$

Figure 5: Hash Function vs MAC Function; Lecture 16

$$m || \underline{E(K_{ab}, H(m))}$$

signature

Known:  $K_{ab}$

A or B ?

Figure 6: Symmetric Encryption cannot provide digital signature; Lecture 16