

**CSCI971 Advance Computer Security:
Homework #7**

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Problem 1

Because AE-secure \Leftrightarrow CPA-secure and CI. Assume a attacker who can perform CPA. He intercept the ciphertext $c = E_1(k, m) = (E(k, m), H(m))$, He can perform as many as CPA, so he can learn the mapping relation of H .

Problem 2**Problem 3**