

Question 4:

- A) Given the plaintext: *0F0E0D0C0B0A09080706050403020100*
and the key: *02020202020202020202020202020202*
Show the original contents of STATE as a 4x4 matrix
Show the value of STATE after initial AddRoundKey
Show the value of STATE after SubBytes
Show the value of STATE after ShiftRows
Show the value of STATE after MixColumns
- B) Show the first eight words of the key expansion for a 128-bit key of value 1.
Assume that you are in the first round.