Two character words are known to have been encrypted by the same 24 bit RC4 stream producing

C1 = 1101 1110 1100 0010 1010 1001

C2 = 1101 1001 1100 1111 1010 1001

Assuming that one of the two words is one of three commonly found English words in EMAILS:

‘sex’, ‘the’ & ‘mp3’

a) Find the other word
b) Find the key