

*Function cca\_secure*

*Input Arguments*

- m- plain text, binary string
- iv-initialization vector, binary string
- block\_length- integer
- k- key, binary string

*Output*

Cipher text – binary string

*Logic*

1. This function calls the cpa\_secure with the respective inputs.
2. The output obtained above is the CPA secure cipher text. It given as input for the function call cbc\_mac and generates CMAC
3. The final output is CMAC concatenated to cipher text.

*Usage*

This function is used to generate CCA secure cipher text that is sent to the receiver.