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MATLAB IMPLEMENTATION, ANALYSIS AND COMPARISON OF DES, 3DES AND AES

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Abstract

This paper implements some of the widely used, Symmetric encryption techniques i.e. DES, 3DES and AES in MATLAB software. After the implementation, this paper compares these techniques on various points. These points are avalanche effect due to one bit variation in plaintext keeping the key constant, avalanche effect due to one bit variation in key keeping the plaintext constant, key length, memory required for implementation, input block size, output buffer size, simulation time required for different length of messages and number of rounds required for complete processing.

Key Words : Encryption algorithm, Decryption algorithm, Ciphertext, Plaintext, Deciphertext.

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