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DES

The Data Encryption standard (DES) is a symmetric-key block cipher published by the National Institute of Standards and Technology (NIST).

DES is an implementation of a Feistel cipher. It uses 16 round Feist structe.

The block size is 64-bit. Though the key length is 64-bit, DES has an effective key length of 56 bits, since 8 of the 64 bits of the key are not used by the encryption algorithm. (function as check bits only)

General structure of DES is depicted in following illustration in next page.

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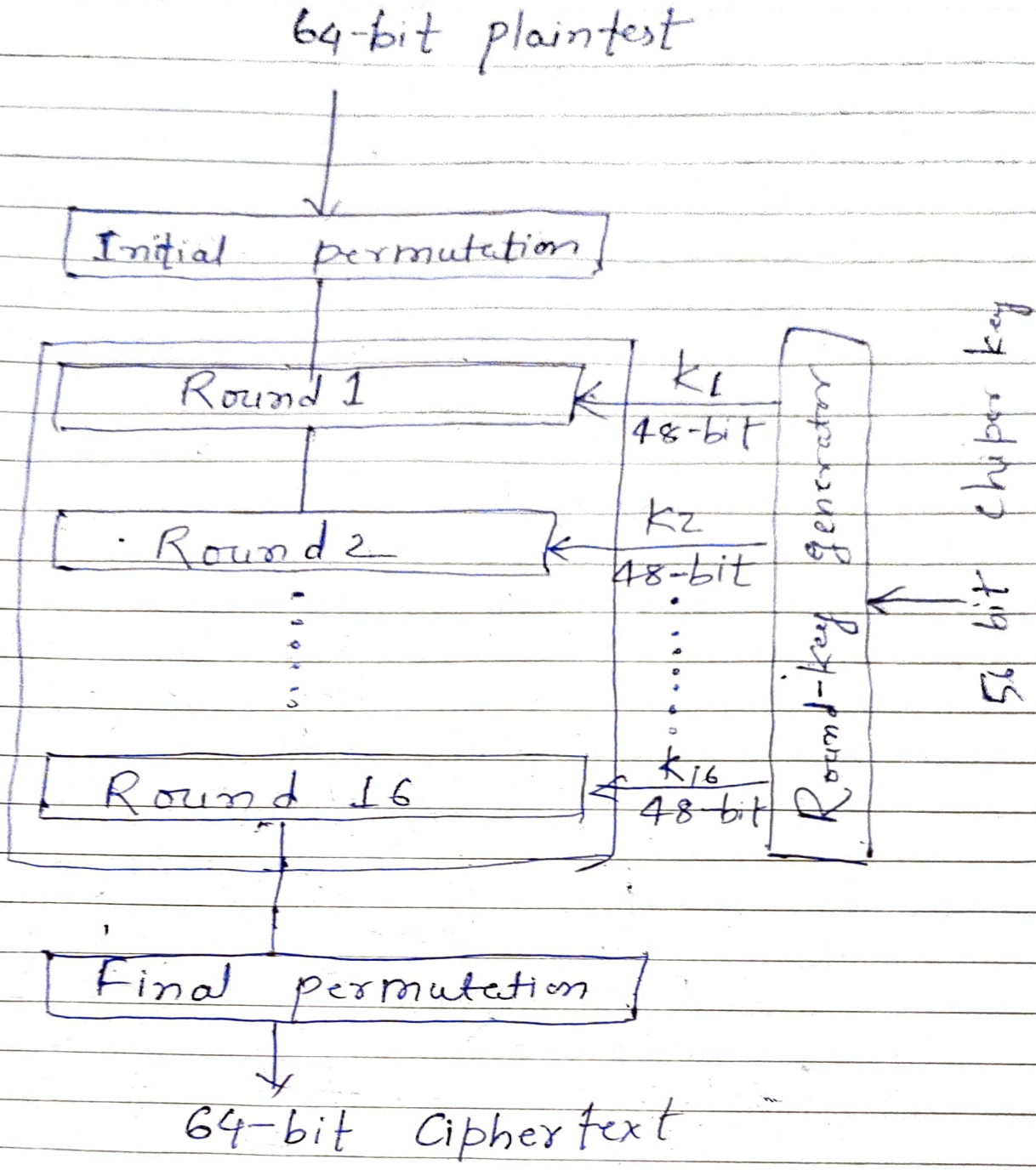

Since DES is based on the Fiestel Cipher, all that is required to specify DES is —

(1) Round function
(2) Key schedule
(3) Any additional processing - Initial & final