Lab Assignment 3: DES

Implement DES algorithm using Java.

I. Encryption
   - Input:
     - Plaintext (any size) saved in Original.txt
     - Key (8 characters) which will be converted into binary [Input from user]
   - Output:
     - Ciphertext (ASCII chars or Hexadecimal) saved in EncryptedFile.txt

II. Decryption
   - Input
     - Ciphertext already saved in Encrypted_File.txt
     - Key [Input from user]
   - Output:
     - Deciphered text saved in Decrypted_File.txt

Special Cases:

- Your code must handle that plaintext size is of any size not only 8 characters.
  - If the plain text size is less than 8 characters your code should handle that by Padding (adding special characters)
  - If the plain text size is more than 8 characters your code should also handle that by dividing plain text to blocks of size 8.
- Your code must handle that key size must be 8 characters by displaying error message and request another key from user.