Title: LFSR Image Encryption

My project is going to be using a linear feedback shift register to encrypt an image. This was a project that I partially completed about a year ago, but I never got the encryption to work. In this project I will have three classes. One will contain static methods that will implement the xor function, one that will convert a binary number to a decimal number, and one main method for testing the other two methods. Another class will have two methods. One that will use those static methods to perform ton shift of the LSFR, and another will perform an inputted number of shifts. There will also be a toString() method and a main method for testing purposes. The final class will be responsible for the image encryption and decryption. This will work by treating an image as a 2-dimensional array of integers that represent each pixel's color and transparency. A method in this class will perform the shifts and generate a new 2-D array of integers that will be the encrypted image. The original array will not be changed. The main method will take three command line arguments, the picture's file name, the initial LSFR "seed" (which is used to construct and LSFR object), and an integer. The seed and the integer are important because by saving and inputting the encrypted image and using the same seed and integer into the command line, you should be able to decrypt the image, thus receiving the original picture.