

## **ASSIGNMENT #2**

**Deadline: 7<sup>th</sup> March, 2024**

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Create a program script in Java, C/C++, or Python that encrypts and decrypts data using RC4. An image file should be read by your script, which should then create an encrypted copy of the same file. Examine the two images and capture screenshots for your report. Now extract the original from the encrypted version using your decryption software. Check that the decryption was done correctly.

You should input 16 ASCII characters into your key length using the keyboard. (These correspond to an encryption key of 128 bits.)

When submitting your program, make sure it is thoroughly documented, with line-by-line explanations of each code line.

Note:

- You are allowed to work in groups of 3.
- Submit your code
- Submit a thorough report of your developed program including descriptions of any assumptions you made and screen shots. (Organize Submission with your TA)
- You are expected to:
  - o Know to manipulate your program so that it can be used to encrypt any file like an audio file.