

PRACTICE No. 4

Using the command console, make sure that Python is installed correctly. Then, create a presentable menu to handle the answers for the following points:

Option 1: Allows you to enter the name of a PDF file and convert it to a text file of ones and zeros, but with its corresponding 8-bit checksum at the beginning of the text file.

Option 2: Allows you to enter the name of a text file of ones and zeros that contains the 8-bit checksum at the beginning. The program must validate if the checksum matches the rest of the file's information.

Option 3: Given the generator polynomial $G(x) = x^3 + x + 1$, this option should allow you to calculate the CRC for a bit sequence that is in a file specified by the user as an input parameter.

Option 4: Given the generator polynomial from the previous point, validate the CRC of a bit sequence in a file specified by the user.

Notes: The only library that can be used is the **os** library. You cannot use commands that have not been covered in class. Submit only one .py file with the following format: Lastname1Firstname1_Lastname2Firstname2.py.