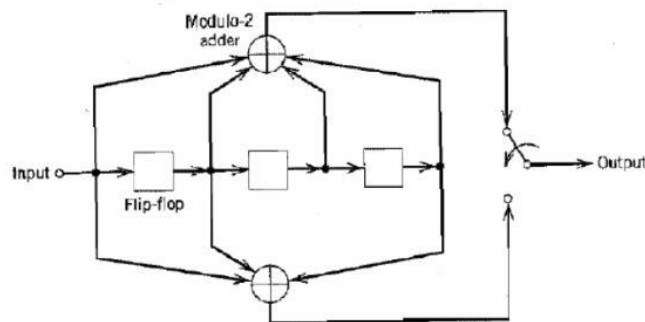




Communication and Information Engineering Program
Information Theory and Coding (CIE 425)
Fall 2022

Assignment 4

The figure below shows the encoder for a rate $r = \frac{1}{2}$, constraint length $K = 4$ convolutional code. Determine the encoder output produced by the message sequence 10111....



Verify your answer by implementing your Convolution Encoder function on MATLAB/Python/C/C++.

Deliverables:

- 1- A README file or PDF that explains all the steps of your implementation in details. (You can write enough comments on your code instead).
- 2- All your code files **MUST** be submitted.

NOTES:

- Make sure your code is clear using meaningful variables' names and enough comments.