

Switching Theory & Logic Design Laboratory
CSE Department, IIT Kharagpur
Spring Semester 2022-23

Module 3 : SEQUENTIAL CIRCUITS AND FSM

Assignment 8 :

1. Design of shift registers
 - a. Implement a 4-bit right shift register using D flip-flops, and verify its operation.
 - b. Design a 4-bit linear feedback shift register (LFSR) that generates 15 distinct pseudo-random patterns (excluding all-zero) in sequence. Hence modify the circuit so that all patterns including all-zero are generated.

(1 day)