## **Exercise 9**

- 1. All switches are originally in low position. Design a sequence by programming the memory that turns one LED on during each clock cycle when S1 is high (starting from D1, then D2 and finally D3).
- 2. Program the memory so that it satisfies the following state diagram. S3 is used for controlling the sequence. During the 00 state D1 is turned on. During the state 01 D2 is turned on and during the state 11 D3 is turned on.

