SHARIF
UNIVERSITY OF
TECHNOLOGY

Embedded Systems

Assignment 1

Author: Kasra Amani
Student No. 98101171

Instructor: **Prof. Ansari**

Date Last Edited: February 28, 2023

Problem 1

In Computation Theory, a Mealy Machine is defined as a machine which outputs a value based on both its current state and current input; in contrast, a Moore Machine's output depends only on its current state. Typically, a Mealy machine requires less states than a Moore machine, but more hardware is needed for a Mealy machine. In a Moore machine, the output is produced one clock cycle later which is not the case in a Mealy machine. Moore machines are easier to design as well.