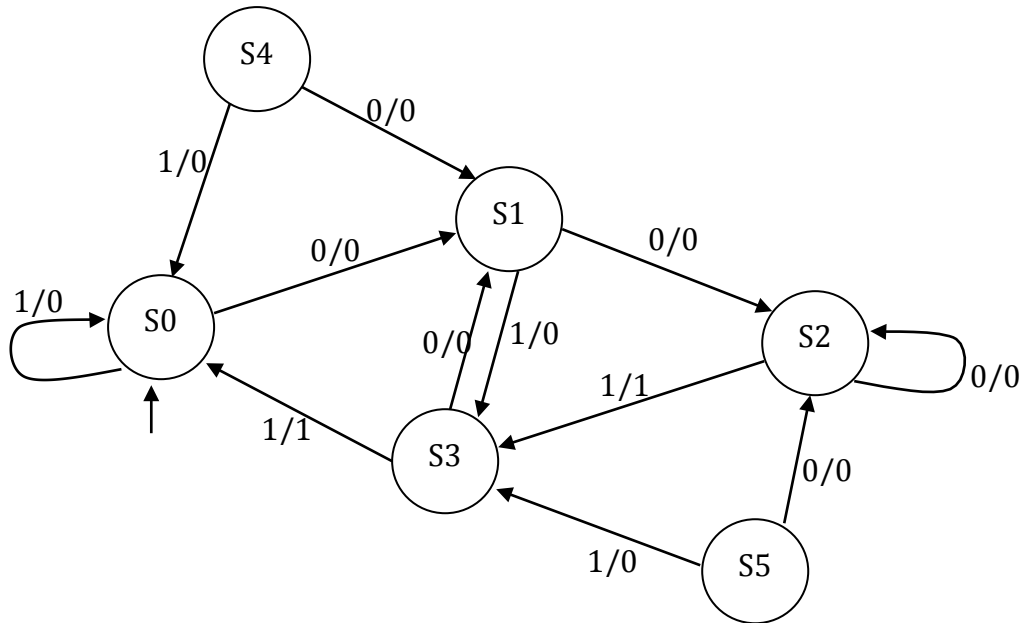# Exercises on the topics of class 18

Exercises with solutions

**Ex. 1.** Consider the Mealy automaton specified by the following diagram:

Draw the Moore equivalent automaton.

SOLUTION:

The Moore automaton is obtained by:
- Deciding one clone of S0 to be the starting state (one among Q0/0 and Q0/1; we choose the first one);
- For every Mealy state, we consider a clone with output 0 and one with output 1 (even though in the picture we don't display useless clones);
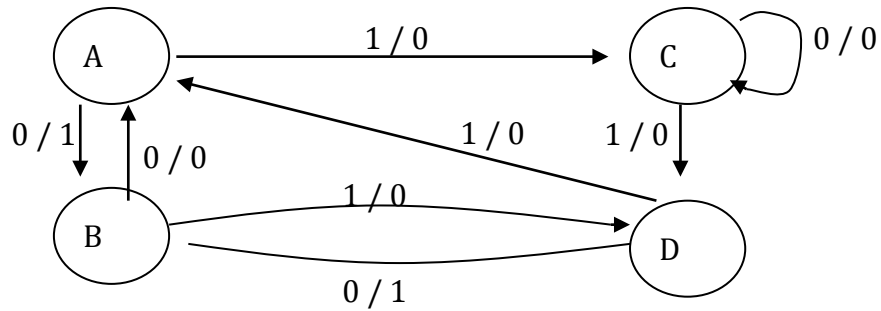- Edges in Moore reflect the transitions and output in Mealy.

So, the required automaton is:
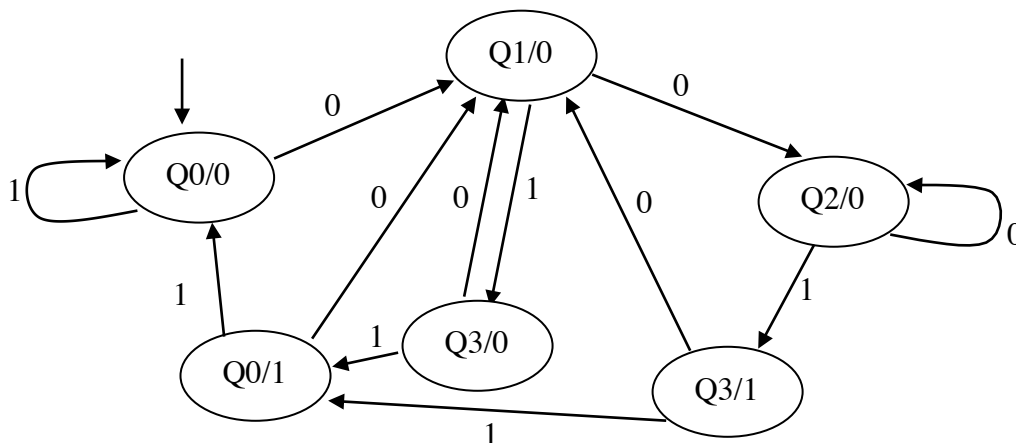
Ex. 2. Consider the following Moore automaton and turn it into an equivalent Mealy automaton:
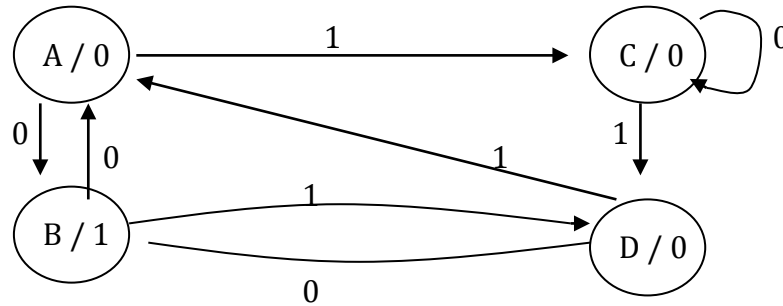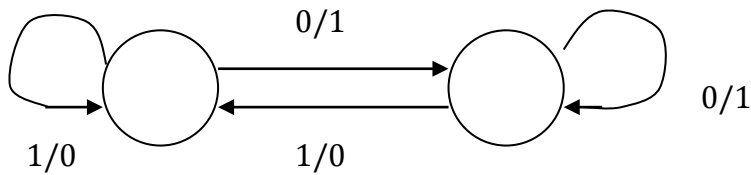

SOLUTION:

Exercises without soultions

Ex. 1. Turn the following Mealy automaton into an equivalent Moore automaton:

Ex. 2. Turn the following Moore automaton into an equivalent Mealy automaton: