GROUP-3
17EC10063
17EC10065

ASSIGNMENT-3

* State Diagram

States:

S0 ← Waiting state or coins worth 0. (00) (Initial)

S1 ← Coins worth 5 { 1-5 coin } (01)

S2 ← Coins worth 10 { either 5+5 or 1-10 coin } (10)

Inputs:

0 ← Five coin input to machine

1 ← Ten coin input to machine

Outputs:

P0 ← Drink dispensed

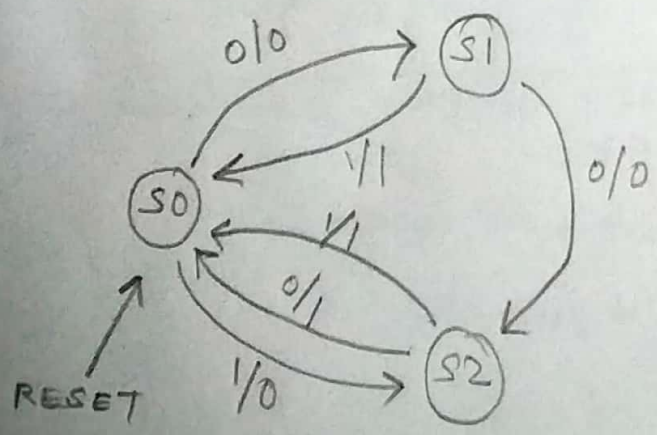
P1 ← Change dispensed

Assumptions

1. At each clock cycle (+ve edge of clock) either a five coin or a ten coin comes (but not both)
2. Atleast one type of coin comes (otherwise the machine remains in its prev. state) [Except Reset condition at beginning]

Diagram

P0 (Drink dispensed)



P1 (Change Dispensed)