Theory of Automata – CS331
Quiz-3
16th April 2024

Construct a finite Mealy's automaton for a vending machine that gives four products (chocolate, orange juice, water, biscuit) as output. Other possible outputs can be the amount exceeding the cost of the product. One product can be selected at a time. The cost of chocolate and biscuits is 12 rupees whereas the cost of orange juice and water is 18 rupees. Consider {2, 4, 6, 8} coin denominations for the required amount. The following conditions must be fulfilled:

1. A cancel C should return the amount in coins accepted by the machine in any current state.