# Vending Machine FSM Requirements

* Accepts nickels, , (five cents) and dimes, (ten cents)
* Dispenses an item, , after 15 cents has been input
* Does not give change
* Only one coin can be inserted at a time (N, D, or neither)

# Determine Inputs and Outputs:

**Inputs:**

**Outputs:**

# State Transition Diagram:

**Number of States:**

**Bits of State Memory (# of D-FFs):**

# State Transition Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Current State | Encoded State | Inputs | Next State | Encoded Next State |
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# State Encoding Table Output Table

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| --- | --- | --- | --- | --- | --- |
| State Name | Encoding |  | State Name | Encoded State | Output |
|  |  |  |  |  |  |
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|  |  |  |  |  |  |

# Next State Logic

A picture containing text, crossword puzzle

Description automatically generated

# Output Logic