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The image displays two screenshots of a PLC simulator interface, showing a state machine ladder logic program. The simulator includes a variable declaration table, a variable value table, and a ladder logic diagram.

Variable Declaration Table:

Name	Type	Value
start	Bool	True
Lo	Bool	True
HI	Bool	False
pump	Bool	True
Valve	Bool	False
reset	Bool	False
state1	Bool	True
state2	Bool	False
state3	Bool	False
state4	Bool	False
state5	Bool	False
TO	Timer	0
PT	Time	2000
ET	Time	0
IN	Bool	False
R	Bool	False
Q	Bool	False

Variable Value Table:

Name	Type	Value
start	Bool	True
Lo	Bool	True
HI	Bool	False
pump	Bool	True
Valve	Bool	False
reset	Bool	False
state1	Bool	True
state2	Bool	False
state3	Bool	False
state4	Bool	False
state5	Bool	False
TO	Timer	0
PT	Time	2000
ET	Time	0
IN	Bool	False
R	Bool	False
Q	Bool	False

Ladder Logic Diagram (Top Screenshot):

- Network 1:** A normally open contact labeled 'reset' is connected to a coil (R) for 'state1'. A normally open contact labeled 'state5' is connected to a coil (R) for 'state1'. A normally open contact labeled 'state4' is connected to a coil (R) for 'state1'. A normally open contact labeled 'state3' is connected to a coil (R) for 'state1'. A normally open contact labeled 'state2' is connected to a coil (S) for 'state1'. A coil (R) for 'pump' is connected to a coil (R) for 'Valve'.
- Network 2:** A normally open contact labeled 'state1' is connected to a coil (S) for 'state2'. A normally open contact labeled 'start' is connected to a coil (R) for 'state1'. A normally open contact labeled 'state1' is connected to a coil (S) for 'state2'.
- Network 3:** A normally open contact labeled 'state2' is connected to a coil (R) for 'state3'. A normally open contact labeled 'Lo' is connected to a coil (S) for 'state3'.
- Network 4:** A normally open contact labeled 'state3' is connected to a coil (S) for 'state4'. A normally open contact labeled 'TO' is connected to a coil (R) for 'state3'. A normally open contact labeled 'state3' is connected to a coil (S) for 'state4'.

Ladder Logic Diagram (Bottom Screenshot):

- Network 1:** A normally open contact labeled 'state1' is connected to a coil (S) for 'state2'. A normally open contact labeled 'start' is connected to a coil (R) for 'state1'. A normally open contact labeled 'state1' is connected to a coil (S) for 'state2'.
- Network 2:** A normally open contact labeled 'state2' is connected to a coil (R) for 'state3'. A normally open contact labeled 'Lo' is connected to a coil (S) for 'state3'.
- Network 3:** A normally open contact labeled 'state3' is connected to a coil (S) for 'state4'. A normally open contact labeled 'TO' is connected to a coil (R) for 'state3'. A normally open contact labeled 'state3' is connected to a coil (S) for 'state4'.
- Network 4:** A normally open contact labeled 'state4' is connected to a coil (R) for 'state5'. A normally open contact labeled 'HI' is connected to a coil (S) for 'state4'. A normally open contact labeled 'state4' is connected to a coil (S) for 'state5'.

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