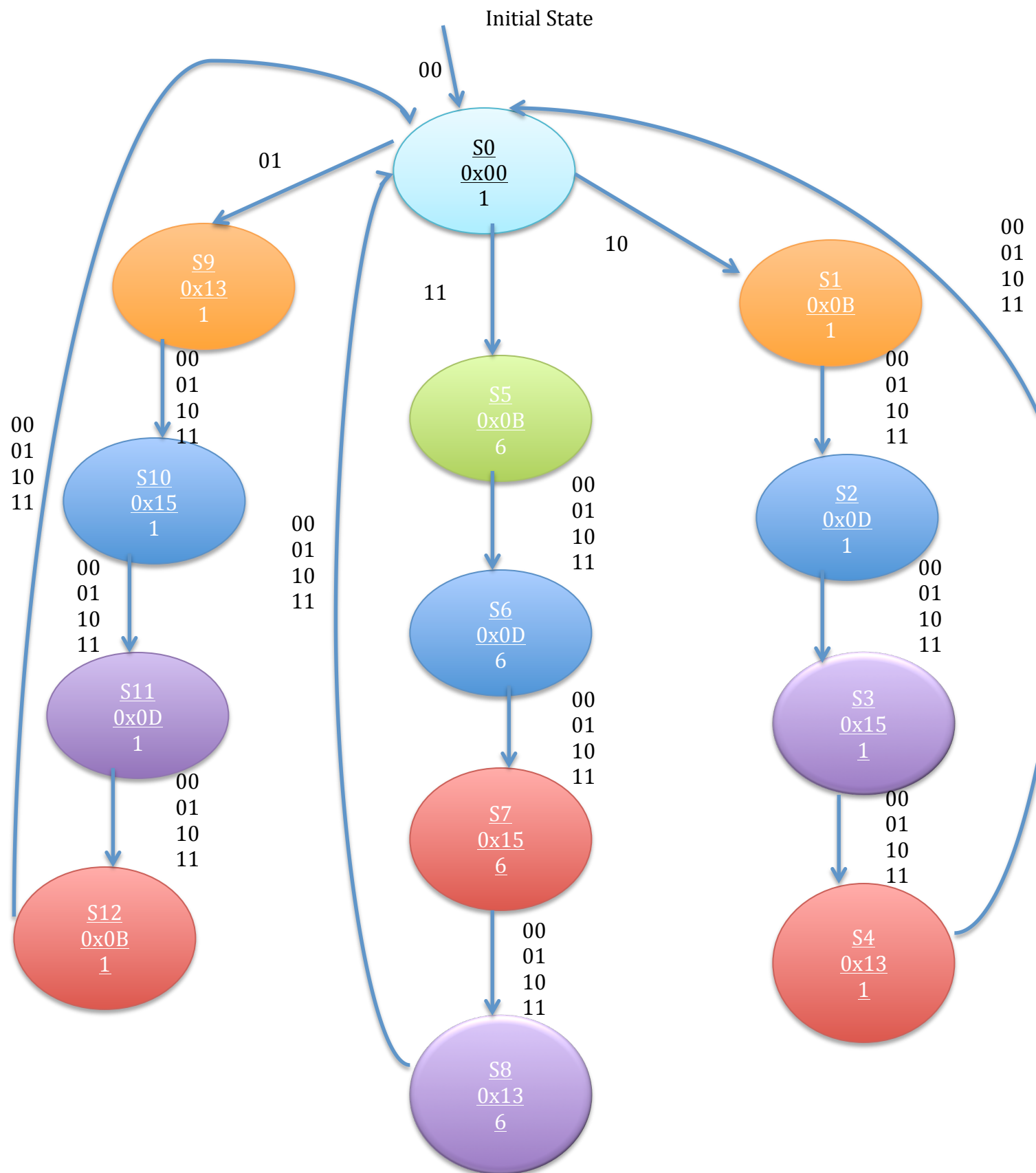


1. Finite State Diagram:



2. Finite State Table:

Present State Next State	0 0	0 1	1 0	1 1
<u>S0</u> <u>0x00</u> 1	S0	S9	S1	S5
<u>S1</u> <u>0x0B</u> 1	S2	S2	S2	S2
<u>S2</u> <u>0x0D</u> 1	S3	S3	S3	S3
<u>S3</u> <u>0x15</u> 1	S4	S4	S4	S4
<u>S4</u> <u>0x13</u> 1	S0	S0	S0	S0
<u>S5</u> <u>0x0B</u> 6	S6	S6	S6	S6
<u>S6</u> <u>0x0D</u> 6	S7	S7	S7	S7
<u>S7</u> <u>0x15</u> 6	S8	S8	S8	S8
<u>S8</u> <u>0x13</u> 6	S0	S0	S0	S0
<u>S9</u> <u>0x13</u> 1	S10	S10	S10	S10
<u>S10</u> <u>0x15</u> 1	S11	S11	S11	S11
<u>S11</u> <u>0x0D</u> 1	S12	S12	S12	S12
<u>S12</u> <u>0x0B</u> 1	S0	S0	S0	S0

