

Design display system to show "EE210 FALL 2020" logo. At your disposal are the 4 binary input lines (a, b, c, d) and 4 seven-segment displays. The display should have following sequence based on the binary inputs:

Binary input	Display 1	Display 2	Display 3	Display 4
0	E	E	2	1
1	E	2	1	0
2	2	1	0	blank
3	1	0	blank	F
4	0	blank	F	A
5	blank	F	A	L
6	F	A	L	L
7	A	L	L	blank
8	L	L	blank	2
9	L	blank	2	0
10	blank	2	0	2
11	2	0	2	0
12	0	2	0	blank
13	2	0	blank	E
14	0	blank	E	E
15	blank	E	E	2

Note: blank in the above map represent space between the words.  
Show truth table, minimum SOP equations along with screenshots of simulated circuit design at following binary inputs: 0, 5, 11, 15

