

Counter Design HW

Instructions:

1. Use 4 bit synchronous up/down counter with Load and Reset.
2. You will design 2 counter.
 - i. First one will count like the following sequence
 - ii. Second one will count in reverse direction

Last Digit of ID	Counting Sequence
0	0,3,4,5,0,3,4,5.....
1	0,1,4,5,6,0,1,4,5,6.....
2	0,1,2,5,6,7,0,1,2,5,6,7.....
3	0,1,2,3,6,7,8,0,1,2,3,6,7,8.....
4
5
6
7
8
9	0,1,2,3,4,5,6,7,8,9,12,13,14, 0,1,2,3,4,5,6,7,8,9,12,13,14,

Display your name in 5-by-5 LED display

Instructions:

- I. For Even ID: Your name will move one column right with each clock pulse.
- II. For Odd ID: Your name will move one column left with each clock pulse.