ComCircuit-Traffic Light: Quiz Solution

www.highlevel-synthesis.com

This file is a resource of the Udemy course: Digital System Design with High-Level Synthesis for FPGA: Combinational Circuits https://www.udemy.com/course/hls-combinational-circuits/?referralCode=8D449A491B9F4582DDEF

If we have a look at the corresponding truth table of the two circuits, then it can be seen that they are opposite of each other.

| L | R | U | D | Rule | EW | NS |
|---|---|---|---|------|----|----|
| 0 | 0 | 0 | 0 | 5 | 1 | 0 |
| 0 | 0 | 0 | 1 | 4 | 0 | 1 |
| 0 | 0 | 1 | 0 | 4 | 0 | 1 |
| 0 | 0 | 1 | 1 | 3 | 0 | 1 |
| 0 | 1 | 0 | 0 | 2 | 1 | 0 |
| 0 | 1 | 0 | 1 | 2 | 1 | 0 |
| 0 | 1 | 1 | 0 | 2 | 1 | 0 |
| 0 | 1 | 1 | 1 | 3 | 0 | 1 |
| 1 | 0 | 0 | 0 | 2 | 1 | 0 |
| 1 | 0 | 0 | 1 | 2 | 1 | 0 |
| 1 | 0 | 1 | 0 | 2 | 1 | 0 |
| 1 | 0 | 1 | 1 | 3 | 0 | 1 |
| 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| 1 | 1 | 0 | 1 | 1 | 1 | 0 |
| 1 | 1 | 1 | 0 | 1 | 1 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 0 |