## CME-2003 Logic Design

## Experiment 3

Gül Eda Aydemir 2015510013

1. Design a circuit that displays the odd and even integers between 0-7. Use a 3x8 DEMUX and 2input AND gates to implement the design.

𝐹1(𝐴,𝐵,𝐶) = ∏(0,2,4,6)

𝐹2(𝐴,𝐵,𝐶) = ∏(1,3,5,7)

1. Preliminary Work Draw truth tables and logic diagrams of the design.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | C | F1 | F2 |
| 0 | 0 | 0 | 1 | 0 |
| 0 | 0 | 1 | 0 | 1 |
| 0 | 1 | 0 | 1 | 0 |
| 0 | 1 | 1 | 0 | 1 |
| 1 | 0 | 0 | 1 | 0 |
| 1 | 0 | 1 | 0 | 1 |
| 1 | 1 | 0 | 1 | 0 |
| 1 | 1 | 1 | 0 | 1 |

1. Bring the logic diagrams and waveforms.



