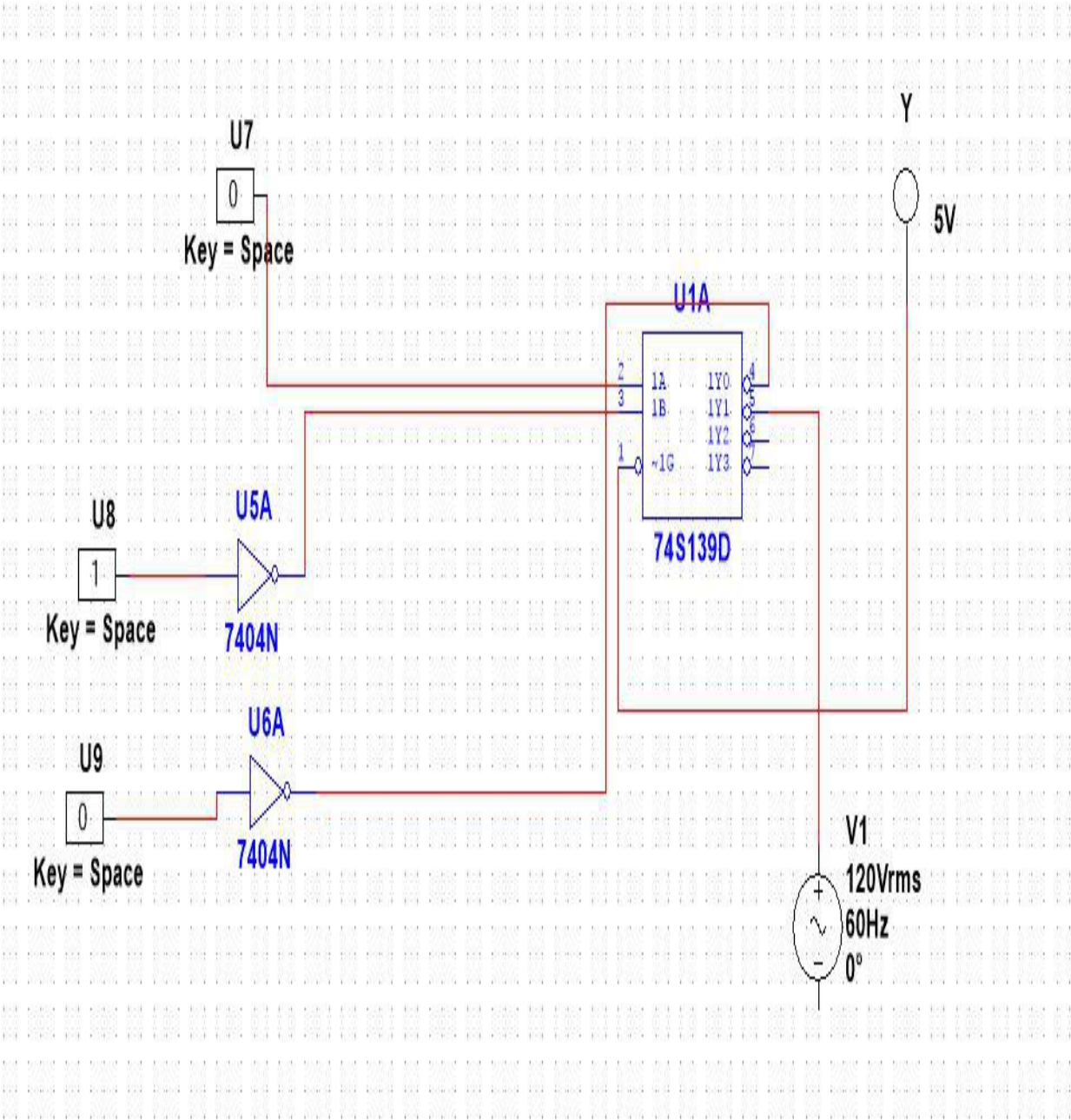


To the Truth Table of 1:4 De-multiplexer using IC 74139



Observation Table:

Input Variable: D, S<sub>0</sub>, S<sub>1</sub> Output Variable: Y<sub>0</sub>, Y<sub>1</sub>, Y<sub>2</sub>, Y<sub>3</sub> LED ON: RED Light:

Logic 1 LED OFF: Green Light: Logic 0

Truth table;

| Data Input | Select Inputs  |                | Outputs        |                |                |                |
|------------|----------------|----------------|----------------|----------------|----------------|----------------|
| D          | S <sub>1</sub> | S <sub>0</sub> | Y <sub>3</sub> | Y <sub>2</sub> | Y <sub>1</sub> | Y <sub>0</sub> |
| D          | 0              | 0              | 0              | 0              | 0              | D              |
| D          | 0              | 1              | 0              | 0              | D              | 0              |
| D          | 1              | 0              | 0              | D              | 0              | 0              |
| D          | 1              | 1              | D              | 0              | 0              | 0              |