- Use while loop
- Use 4 led and 3 push buttons (Count Up by 1, Count Up by 1, Reset)
- Counter Variable: A numeric variable (counter) initialized to zero is used to keep track of the current count (range: 0 to 15),used the register shift.
- I used the function number to boolean array: It converts the counter value into a boolean array that is used to update the status of the LEDs.
- After converting the numerical value of the counter (from 0 to 15) into a Boolean array using the Number to Boolean Array function, the array can represent the binary value of the counter.

For example, if the value is 5, the array would be [1, 0, 1, 0].

By using **Index Array**, you can easily extract each individual bit:

- Index 0 for LED0 (LSB)
- Index 1 for LED1
- Index 2 for LED2
- Index 3 for LED3 (MSB)

- **Count Up by 1 Logic**:

When the "Count Up by 1" button is pressed, you can use the **Increment** function to increase the counter value by 1.

Select:

- The **Select** function is used to decide whether the counter should increase or not.

- The condition here is to check if the counter value is less than 15:
    - If the counter value is less than 15, **Select** will pass the incremented value to the counter.
    - If the value is already 15, the counter will remain at its maximum value (15), and a warning message ("You reached the max value!") will be displayed.
- This means that it will light up in this case as follows(0001,0010,0011,0100,0101,0110,0111,1000,1000,1010,1011,1100,1101,1110,1111,then display meg)

- **Count Up by 2 Logic:**
  When the "Count Up by 2" button is pressed, 2 is added to the current counter value.
  The counter should not exceed 15, and once it reaches 15 (or greater after the addition), the warning message "You reached the max value!" should be displayed, and the counter should stop at 15.

Select:

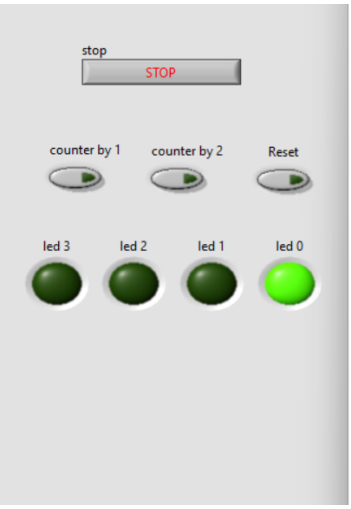
The Select function is used to check whether the counter has reached or exceeded 14. counter >= 14.

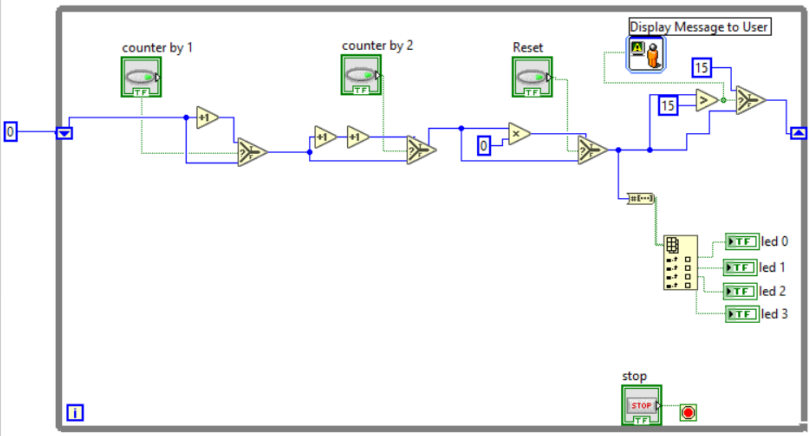
This means that it will light up in this case as follows(0010,0100,0110,1000,1010,1100,1110, then display meg)

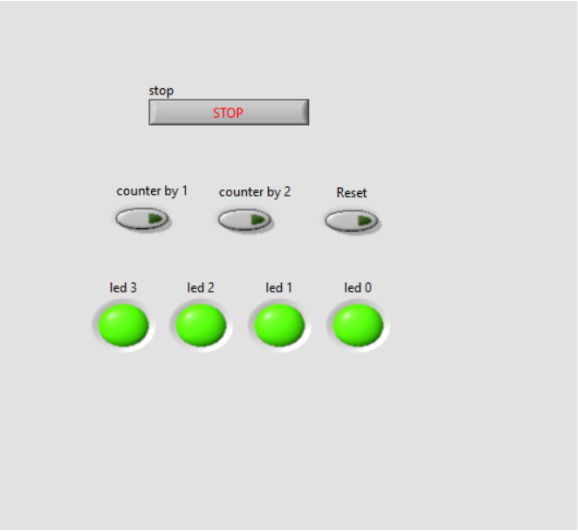
- **Reset Logic:**

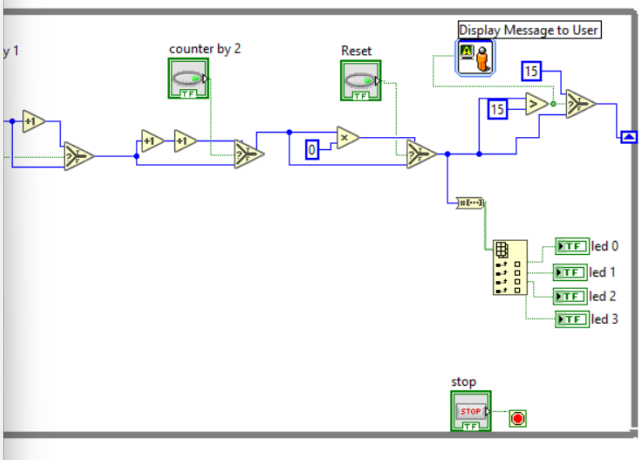
When the "Reset" button is pressed, the counter is set back to 0, and the warning message is cleared.

Screenshots for count 1:

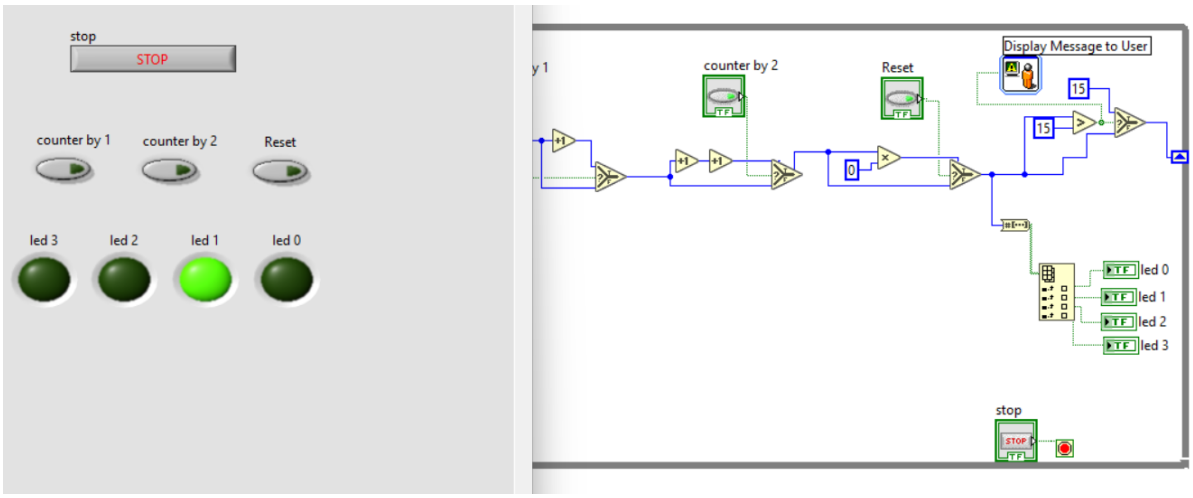


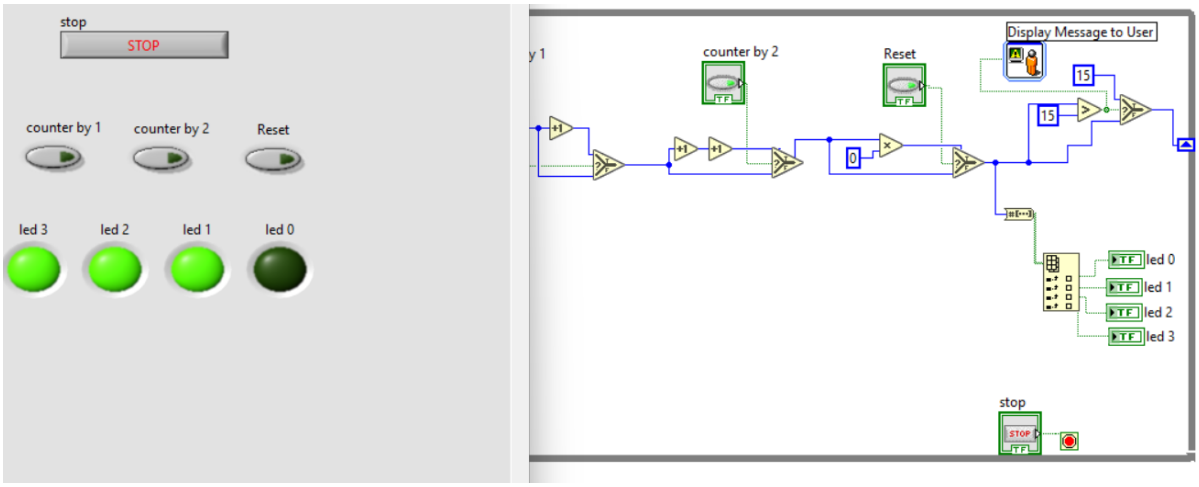


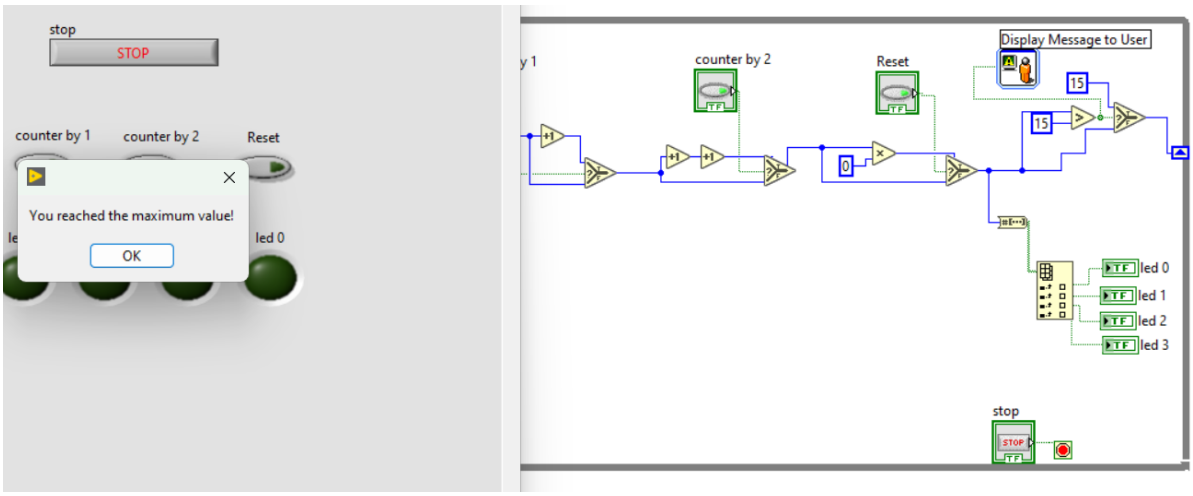




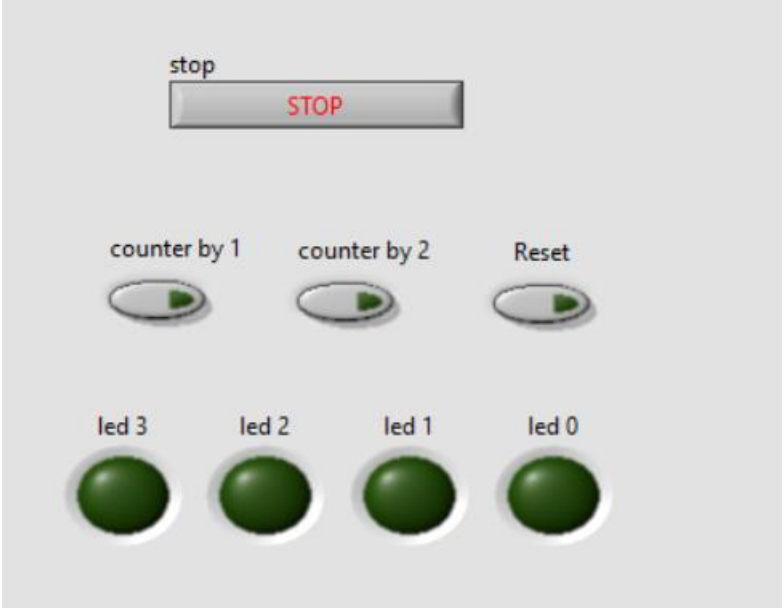
Screenshots for count 2:







Screenshots for Reset:


stop
STOP
counter by 1
counter by 2
Reset
led 3
led 2
led 1
led 0