Event 0:

- do nothing

Event 1:

- take picture
    - Turn on LED
- Aftermath: nothing

Event 2 (Solution pump 1 sec):

- Turn solution pumps on
    - Inject dextran + dye solution from one pump
    - Inject PEG solution from the other pump
- Wait for 1000 ms (PAUSE)
- Solution pumps off
- GOSUB Event 1

Event 3 (Pump reverse 1 sec):

- Turn solution pumps reverse
    - Retract dextran + dye solution from one pump
    - Retract PEG solution from the other pump
- Wait for 1000 ms (PAUSE)
- Solution pumps off
- GOSUB Event 1

Event 4 (Acid pump 1 sec):

- Turn acid pump on
- Wait for 1000 ms (PAUSE)
- Acid pump off

Event 5: Loop everything

- Set to Day 0 and Hour 29
- Replay events 1-4 (7 one second injection intervals followed by 7 one second retraction intervals)
- Write to event table

Loop 7 one second interval procedure

- Reset to right before event n occurs
    - Write to DurDay, DurHour, DurMin
    - Use TempReg to write to event table
    - $FF code
    - **Alternatively manually 7 times using event table (refer to last year code)**
    - Boolean variable idea - times change before events, toggle variables

Event 6: Loop Event 1 36 times every 10 minutes

- Use counter variable to count times jumped back to DurDay 0 DurHour 23 DurMin 0
- If i < 36 then set (DurDay,DurHour,DurMin) = (0, 23, 59) and i++
- If i >= 36 do nothing

1. Start experiment by waiting for a day
    a. DurDay : 0
    b. DurHour: 0
    c. DurMin: 0
    d. Event # : 0
2. Take Photo #1
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin : 0
    d. Event # : 1
3. Begin pumping solution
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin : 3
    d. Event # : 2
4. Begin pumping solution
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin : 6
    d. Event # : 2
5. Begin pumping solution
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin : 9
    d. Event # : 2
6. Begin pumping solution
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin : 12
    d. Event # : 2
7. Begin pumping solution
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin : 15
    d. Event # : 2
8. Begin pumping solution
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin : 18
    d. Event # : 2
9. Begin pumping solution
    a. DurDay : 1
    b. DurHour: 0

    c. DurMin : 21
    d. Event # : 2
10. Take Photo
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin : 24
    d. Event # : 1
11. Loop Event 1
    a. DurDay: 1
    b. DurHour: 0
    c. DurMin: 33
    d. Event #: 6
12. Reverse pumping
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin : 36
    d. Event # : 3
13. Reverse pumping
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin : 39
    d. Event # : 3
14. Reverse pumping
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin : 42
    d. Event # : 3
15. Reverse pumping
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin : 45
    d. Event # : 3
16. Reverse pumping
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin : 48
    d. Event # : 3
17. Reverse pumping
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin : 51
    d. Event # : 3
18. Reverse pumping
    a. DurDay : 1

    b. DurHour: 0
    c. DurMin : 54
    d. Event # : 3
19. Acid Pumps
    a. DurDay : 1
    b. DurHour: 0
    c. DurMin: 57
    d. Event # : 4
20. Acid Pumps
    a. DurDay : 1
    b. DurHour: 1
    c. DurMin: 0
    d. Event # : 4
21. Acid Pumps
    a. DurDay : 1
    b. DurHour: 1
    c. DurMin: 3
    d. Event # : 4
22. Acid Pumps
    a. DurDay : 1
    b. DurHour: 1
    c. DurMin: 6
    d. Event # : 4
23. Acid Pumps
    a. DurDay : 1
    b. DurHour: 1
    c. DurMin: 9
    d. Event # : 4
24. Acid Pumps
    a. DurDay : 1
    b. DurHour: 1
    c. DurMin: 12
    d. Event # : 4
25. Acid Pumps
    a. DurDay : 1
    b. DurHour: 1
    c. DurMin: 15
    d. Event # : 4
26. Loop everything
    a. DurDay: 1
    b. DurHour: 1
    c. DurMin: 18
    d. Set DurDay: 0
    e. Set DurHour: 23

f. Set DurMin: 0
g. Event #: 5