Game of Life

- Need to create an int 2D array
  - Int cell - since neighbors can't be higher than 8
    - First number is 1/0 where 1 is alive
      - Cell number /10 = 1 is alive
      - Cell number /10 = 0 is dead
    - Second number is neighbors
      - Cell number %10 is neighbors
- Need to know if a cell is alive and how many neighbors it has
  - If alive cell's neighbors doesn't equal 2 or 3 it dies
  - If dead cell's neighbors equals 3 it become alive
    - Loop through array and add 1 to appropriate cells for all live cells
    - Loop through array a second time to figure out next generation value of that cell
      - Add 10 if cell is dead and had a value of 3
      - Subtract 10 is cell is alive and doesn't have a value of 12 or 13
- Need to deal with edges
  - Try extra columns/rows
    - set up to test above make the first and last few columns/rows invisible

2 arrays where first is current and second is future/ swap

- Add/Subtract 10 before adding to future array where increments are stored
- Afterward zero out the cell

oscillator is 3 rows and 5 columns

1	2	3	2	1
1	11	12	11	1
1	2	3	2	1

glider is 5 columns and 5 rows

.	.	.	.	.
.	o	o	o	.
.	o	.	.	.
.	.	o	.	.
.	.	.	.	.

1	2	3	2	1
2	12	13	11	1
2	13	5	3	1
1	2	11	1	0
0	1	1	1	0

.	.	.	.	.
.	.	o	.	.
.	o	o	.	.
.	o	.	o	.
.	.	.	.	.
.	.	.	.	.

0	1	1	1	0
1	3	12	2	0
2	13	14	3	1
2	12	4	11	1
1	1	2	1	1
0	0	0	0	0

.	.	.	.	.
.	o	o	.	.
.	o	.	o	.
.	o	.	.	.
.	.	.	.	.

1	2	2	1	0
2	12	13	2	1
3	13	5	11	1
2	11	3	1	1
1	1	1	0	0

glider gun is 38 columns and 11 rows

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	11	2	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	1	0	0	0	0	1	2	3	11	3	11	2	0	0	0	0	0	0	0	1	2	2	1
3	0	0	0	0	0	0	0	0	0	0	0	1	2	12	11	2	1	1	0	0	2	13	13	3	2	1	1	0	0	0	0	0	0	0	2	13	13	2
4	1	2	2	1	0	0	0	0	0	0	1	2	12	3	2	3	11	2	1	0	3	15	15	3	0	0	0	0	0	0	0	0	0	0	2	13	13	2
5	2	13	13	2	0	0	0	0	0	0	2	12	3	1	1	2	4	13	3	1	2	13	14	3	2	1	1	0	0	0	0	0	0	0	1	2	2	1
6	2	13	13	2	0	0	0	0	0	0	3	12	3	0	1	10	4	13	13	1	1	2	3	11	3	11	2	0	0	0	0	0	0	0	0	0	0	0
7	1	2	2	1	0	0	0	0	0	0	2	12	3	1	1	2	4	13	3	1	0	0	1	1	3	11	2	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	1	2	12	3	2	2	11	2	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	1	2	12	11	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0