Visual Programming for Computational Thinking
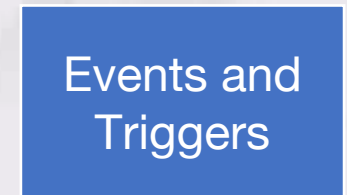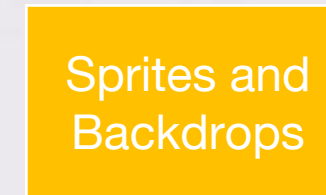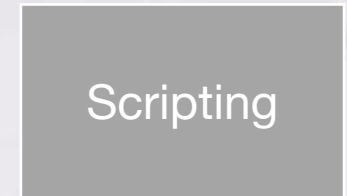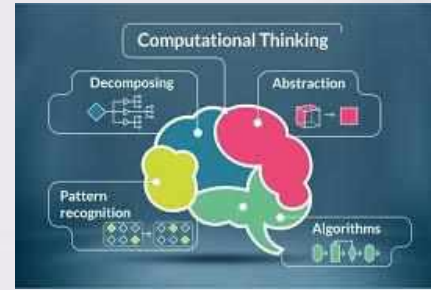
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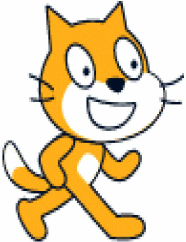Mathematics Education Specialist
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Blocks

Scripting

Sprites and Backdrops

Events and Triggers

Sharing and Collaboration
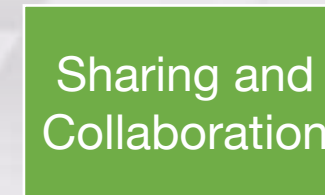
From Simple to More Complex

Let's explore the Scratch environment by changing the Stage backdrops.

Let's try to guess the meaning of the script structure by using the given

For example,

If you add a repeat command, what will happen?

Before: Guess & Discuss

Check & Confirm

After: Change parameter & Command

How to loop four times with changing the Stage backdrops and questions!
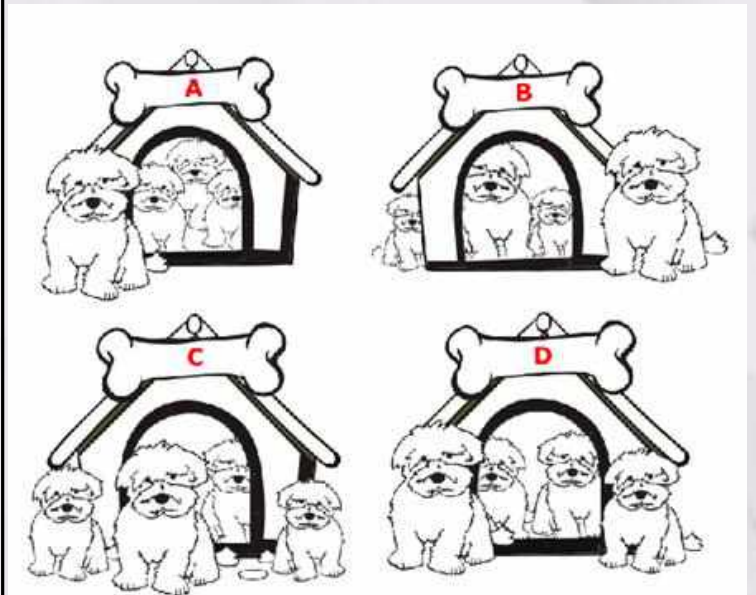
Meet the highest value: Neighboring cell

Take a step to the neighboring cell with the highest number, but if there is no cell higher than the present cell, then stays there. Starting from where the number 2 is located.

2	1	3	5	6	3	3	4	3	0
10	3	2	2	7	4	5	5	4	2
11	13	2	3	4	9	10	3	14	13
21	3	20	4	4	19	5	15	4	3
22	4	4	20	5	25	6	16	25	5
30	24	5	18	6	25	6	6	19	4
32	4	6	16	6	17	6	6	4	4
2	4	26	15	12	19	27	35	25	15
32	34	36	37	38	10	47	41	35	14
38	44	35	8	39	28	29	38	18	13
11	4	4	6	40	38	9	10	11	12
0	0	3	4	41	8	8	5	4	2

Write scripts to compare 2 numbers.

Let's discuss and explain how to write scripts to compare more than 3 numbers.

Let's discuss how to write scripts to compare 3 numbers.

Through the activity students are able to apply Computational Thinking Skills:
- Decomposition
- Pattern Recognition
- Abstraction
- Algorithm