

Plugged Computational Thinking Coding Activities With Scratch 3.x

Exercise 1)

<https://scratch.mit.edu/projects/29320712/>

In the Name project, Dean (the project creator) has designed an animated project that features his name. How could we **extend** this project? Dean wants the N to **appear after** the A, not at the same time. What is the bug? How do we fix the bug? Dean wants the N to do something interesting (like the other letters), but **only when the N is clicked**. How do we add this feature?

<https://scratch.mit.edu/projects/29320712/editor/>

D	E	A	N

Solution

Questions

1. Why do I set the turn to 36 degrees?
2. How do I ensure that the size from 50% goes back to 100%?
3. Which command do I include to achieve that N appears after A?

Exercise 2)

<https://scratch.mit.edu/projects/29321480/>

In the Fruit Quiz project, Mylo designed a fruit quiz with an apple, a banana, and an orange. How could we **extend** this project? Mylo wants to display “Perfect!” at the end of the project **if** all three fruit were correctly identified, and “Almost!” otherwise. But the project always displays “Perfect!” What is the bug? How do we fix the bug? Mylo wants to **add** another fruit to his quiz. How do we add this feature?

<https://scratch.mit.edu/projects/29321480/editor/>

No Sprite in this Game

The code blocks are as follows:

- when clicked: switch backdrop to intro
- when stage clicked: broadcast start
- when I receive start: set Number correct to 0, switch backdrop to apple, ask "What is this fruit?" and wait, if answer = apple then change Number correct by 1, switch backdrop to banana, ask "What is this fruit?" and wait, if answer = banana then change Number correct by 1, switch backdrop to orange, ask "What is this fruit?" and wait, if answer = orange then change Number correct by 1, switch backdrop to end - perfect

Number correct 0

identify the three fruit!

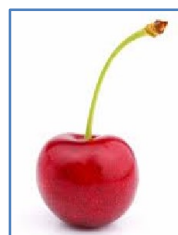
click to continue...

1 intro 480 x 360
2 apple 333 x 300
3 banana 460 x 360
4 orange 310 x 335
5 end - perfect 480 x 360
6 end - almost 480 x 360

Solution

Questions

1. Where to I click to start the game?
2. What blocks are used to start the game?
3. How do I insert another fruit image in the game
4. Why do I use a variable to solve the problem
5. What other block do I use to solve the problem



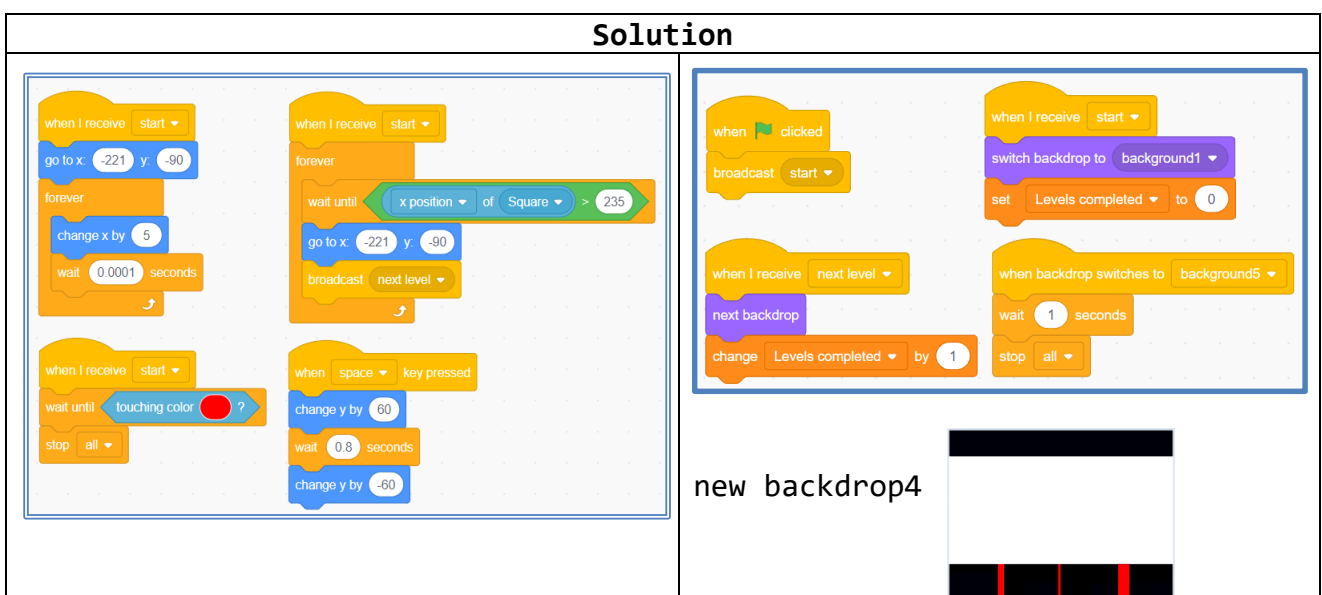
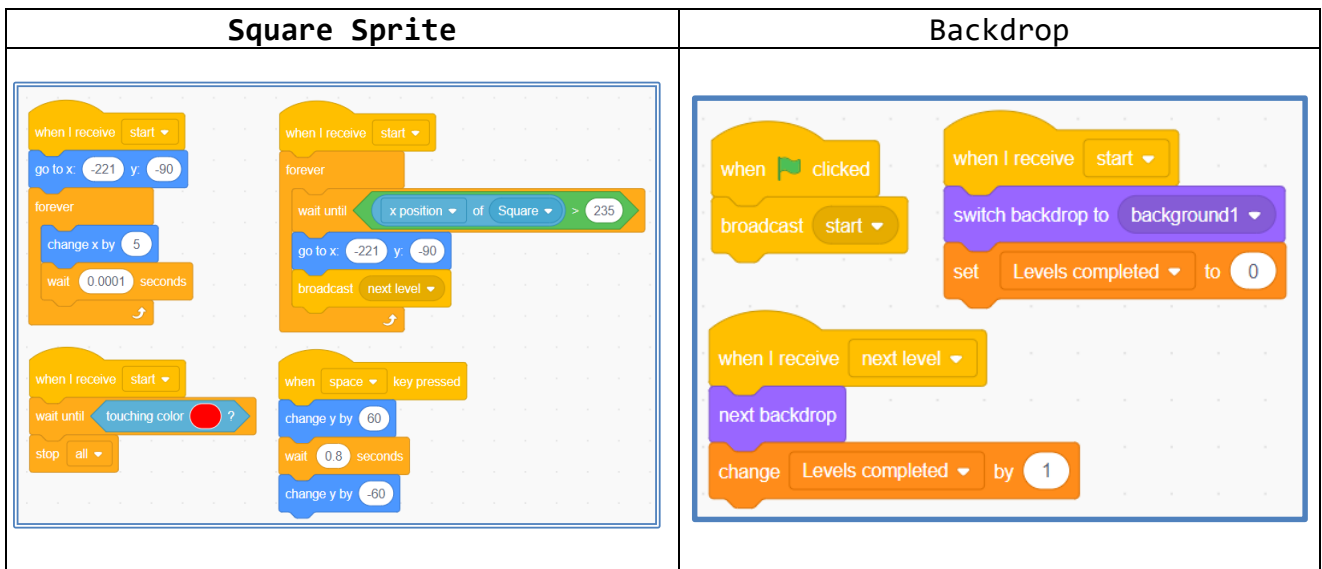
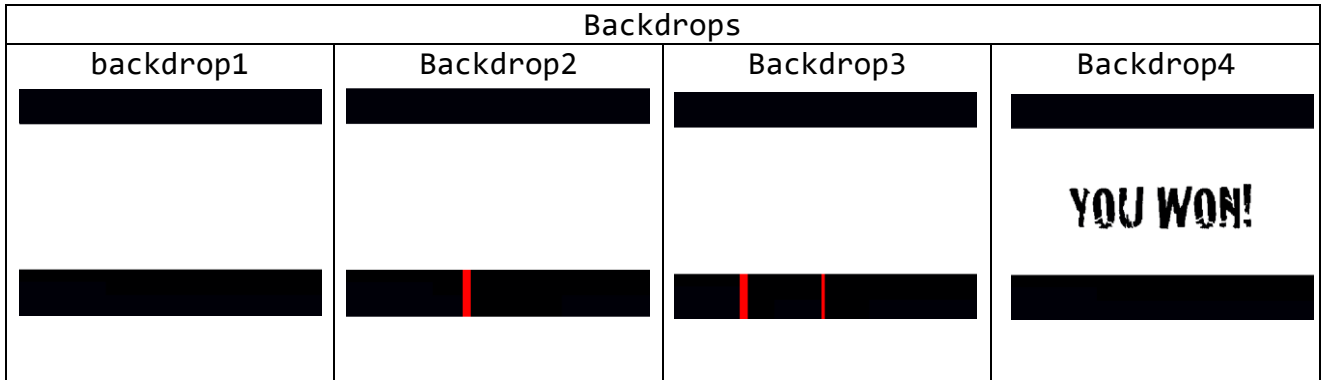
The code blocks are as follows:

- when I receive start: set Number correct to 0, switch backdrop to apple, ask "What is this fruit?" and wait, if answer = apple then change Number correct by 1, switch backdrop to banana, ask "What is this fruit?" and wait, if answer = banana then change Number correct by 1, switch backdrop to orange, ask "What is this fruit?" and wait, if answer = orange then change Number correct by 1, switch backdrop to cherry, ask "What is this fruit?" and wait, if answer = cherry then change Number correct by 1, if Number correct = 4 then switch backdrop to end - perfect, else switch backdrop to end - almost

Exercise 3)

<https://scratch.mit.edu/projects/29321430/>

In the Jump project, Amaya has designed a three-level obstacle jumping game. How could we **extend** this project? Amaya wants the game to **stop** after the **three** levels are completed. What is the bug? How do we fix the bug? Amaya wants to add **another** level to her jumping game. How do we add this feature?




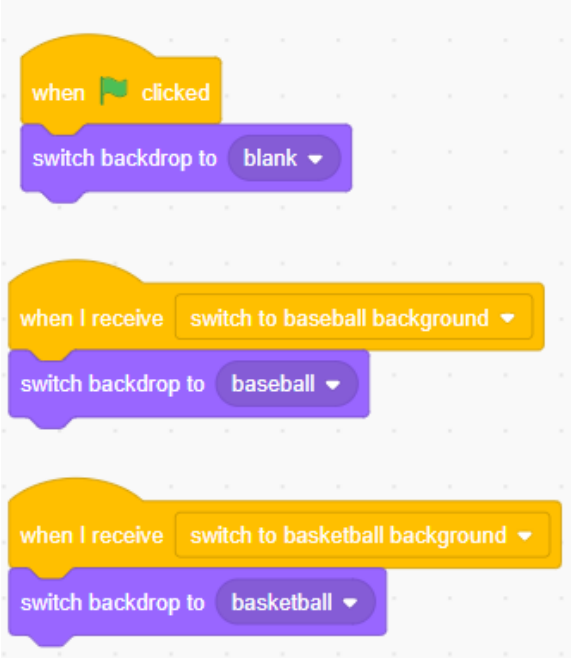
Questions

1. How do I insert another level into the game?
2. What block do I add to stop after 3 successfully completed levels?

Exercise 4)

<https://scratch.mit.edu/projects/29321310>

In the Sports Scenes project, Gracie has designed a project that helps people learn about sports. How could we extend this project? Gracie wants to show the Tennis background when the Tennis button is clicked. What is the bug? How do we fix the bug? Gracie wants the baseball to appear and say, “Do you know who invented baseball?” when the Baseball button is clicked. How do we add this feature?

Tennis Sprites	Backdrops
	

The “When I receive block” was not filled out for the tennis broadcast

Solution	
Baseball Sprite	Backdrops
