

# **Unit 4**

## **Session 4**

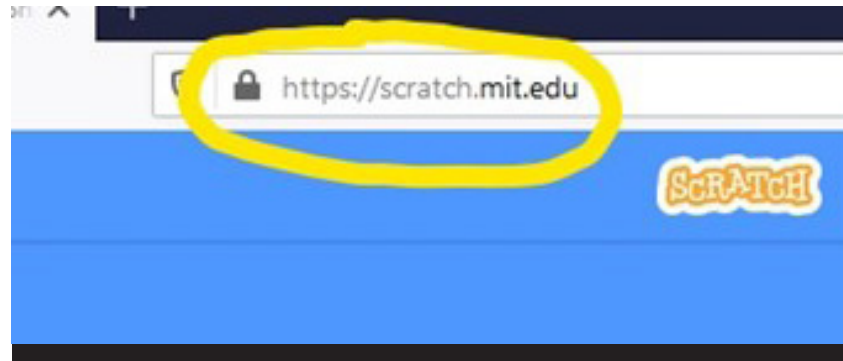
# **Extension Handout**

# Extension



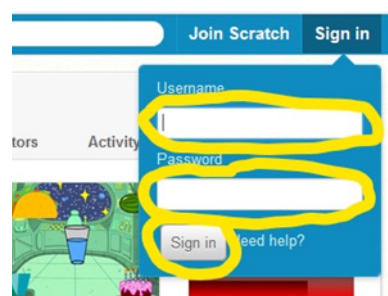
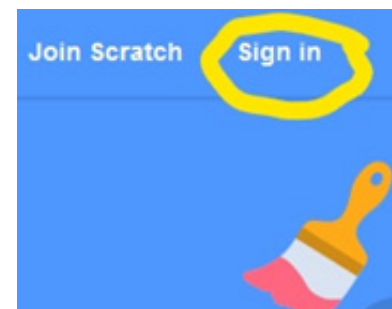
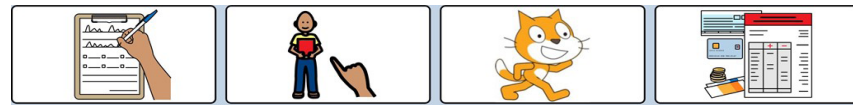
1

Go to the Scratch at <https://scratch.mit.edu/>



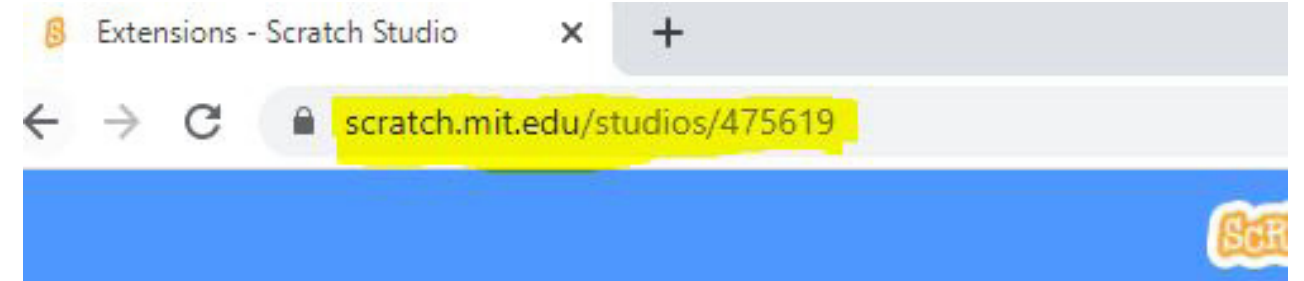
2

Sign into your account.



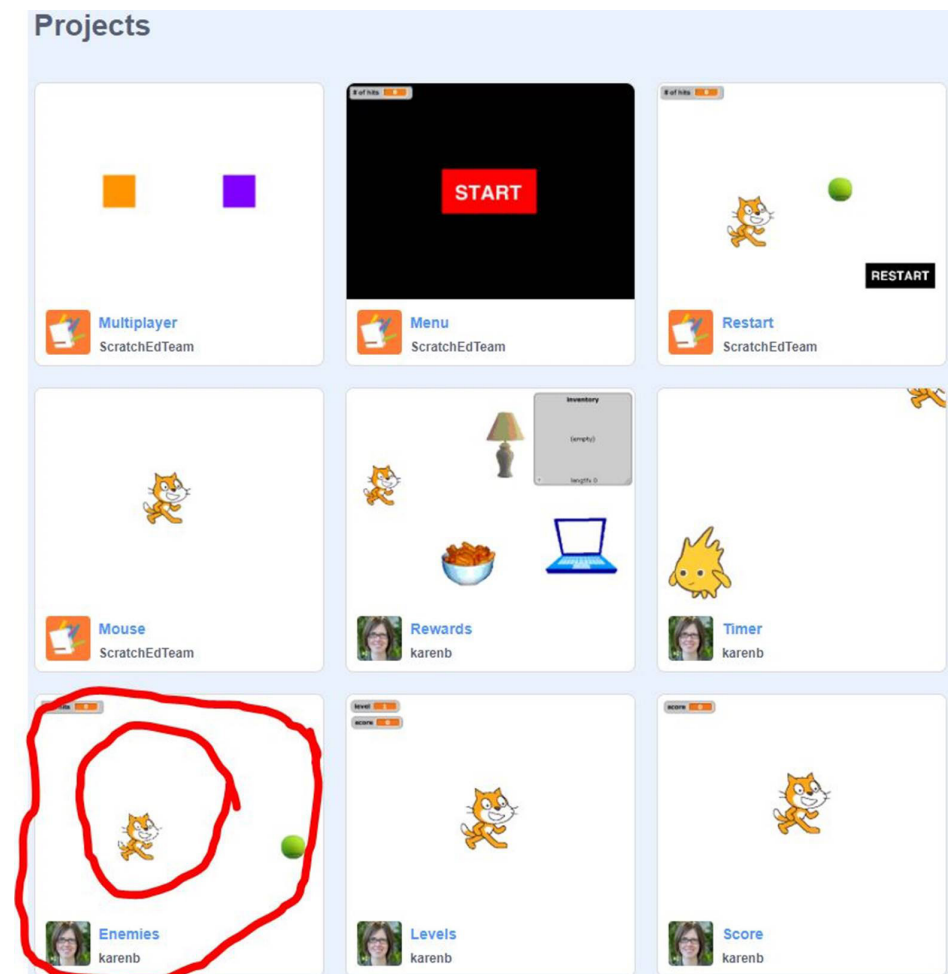
3

Go to the Extensions studio at: <http://scratch.mit.edu/studios/475619>.



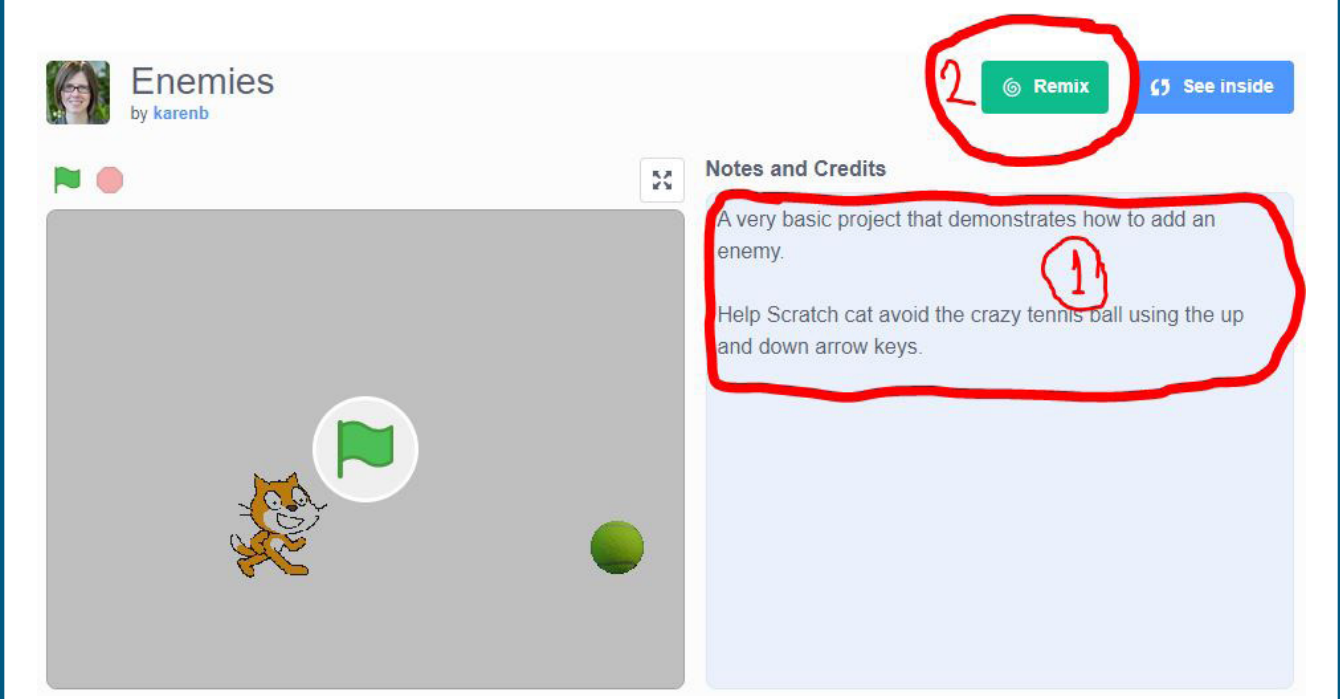
4

Tap on one of the projects to extend and reimagine.



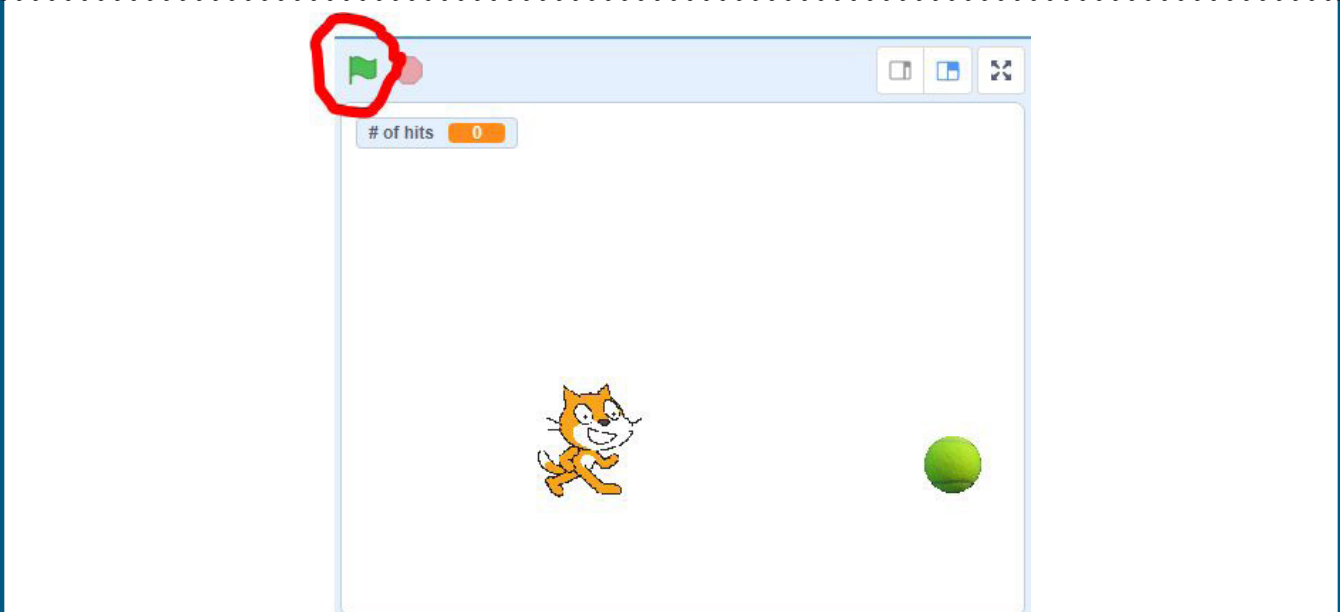
5

(1) Read notes and credits to understand what the project does, and  
(2) tap on remix to start extending the project.



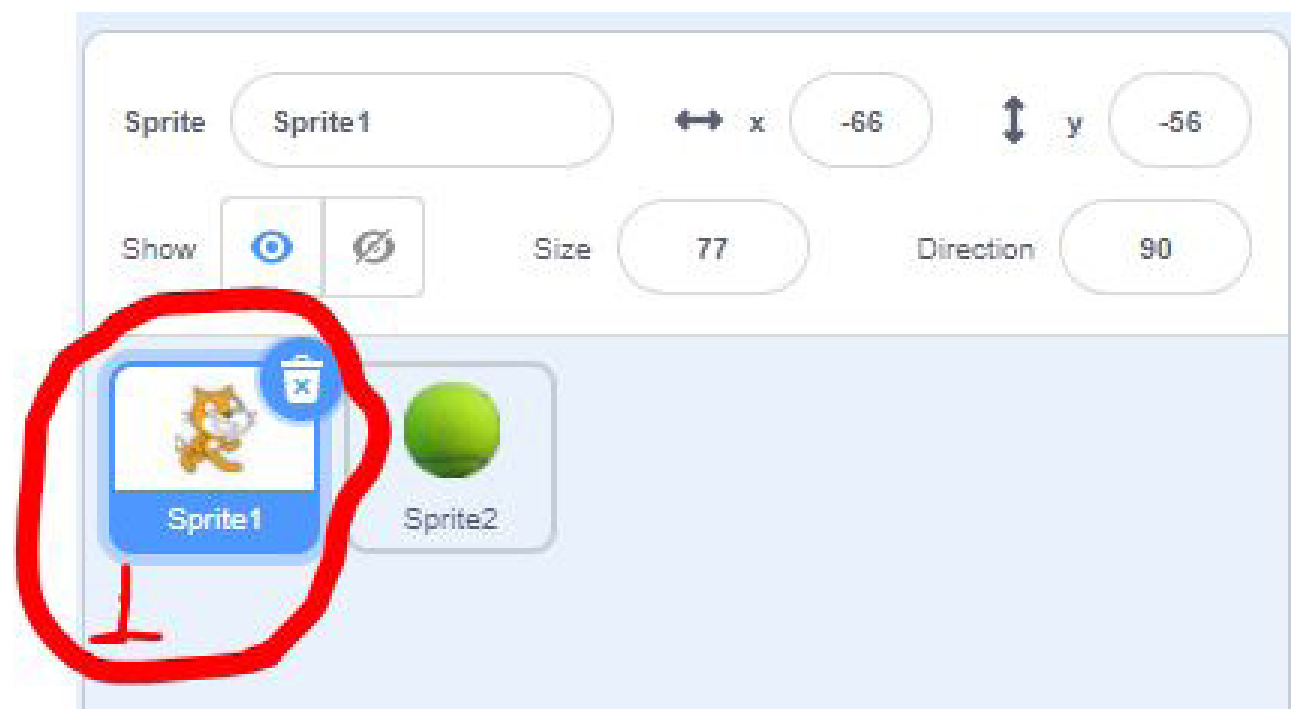
6

Tap on the Green Flag on the top-left corner of the stage to play the project and understand how the game runs.



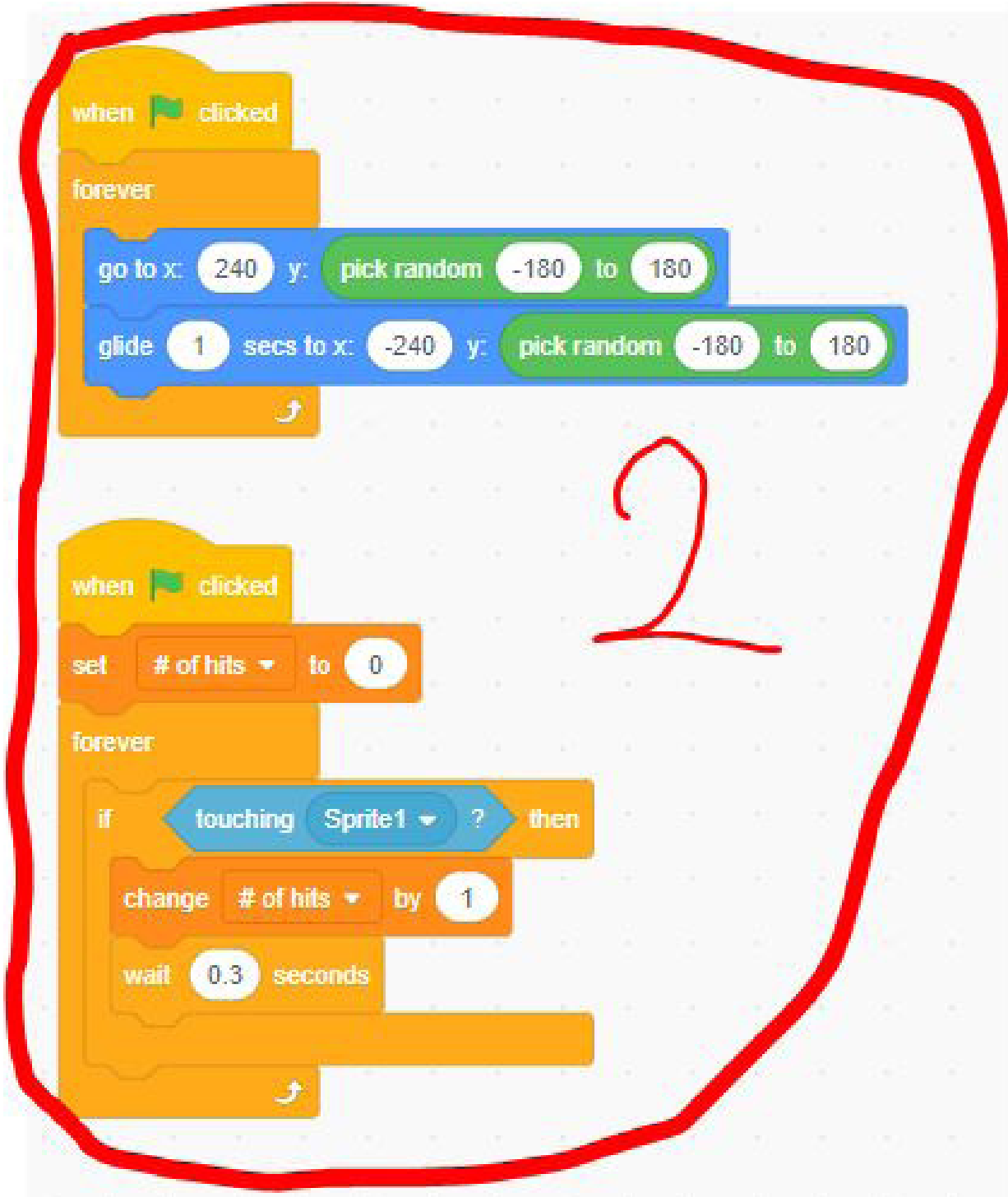
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(1) Tap on Sprite1 to see the block sequences attached to this sprite, and  
(2) understand that the sequences attached to this sprite moves the cat up and down upon pressing up and down arrows.



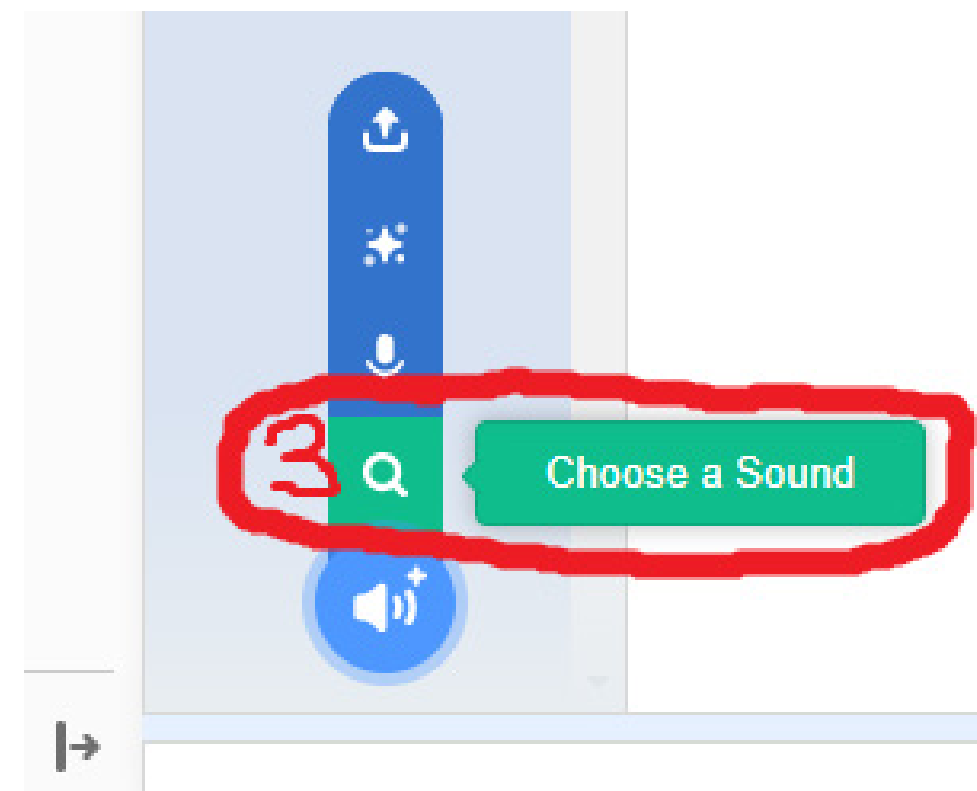
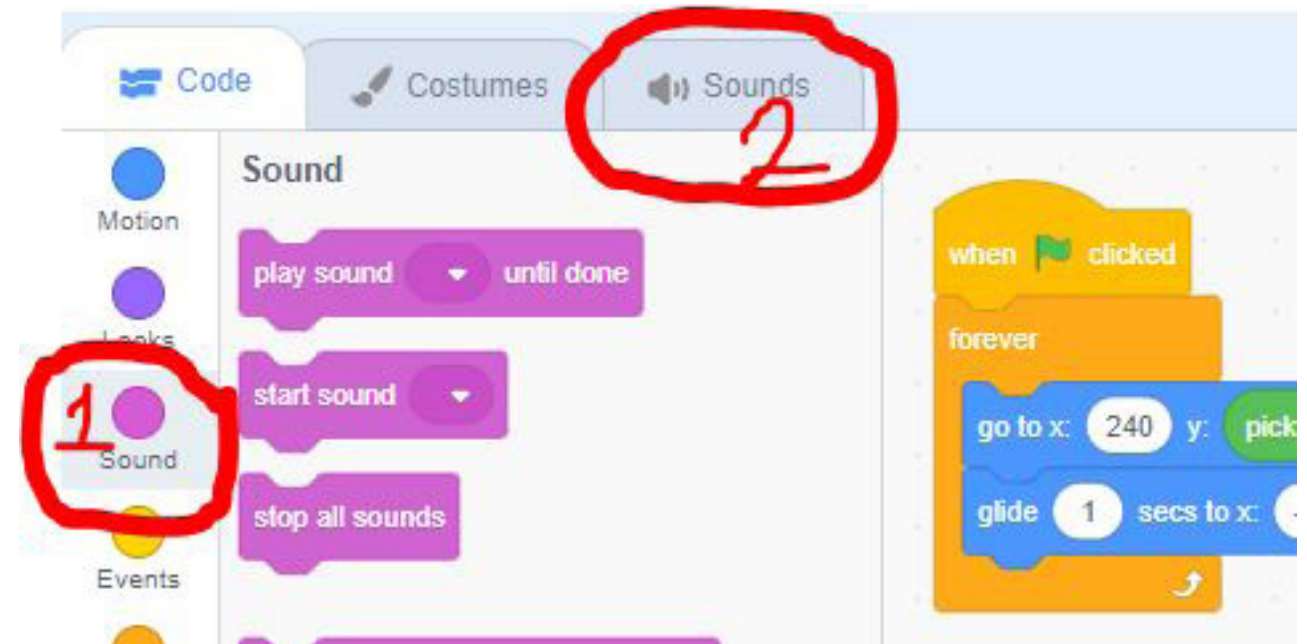
8

(1) Tap on Sprite2 to see the block sequences attached to this sprite, and  
(2) understand that the first set of sequence moves the ball from right side of the screen to the left and the second set of sequence keeps a score of the number of hits by increasing the “# of hits” variable by one each time the ball sprite (Sprite2) touches the cat sprite (Sprite1).



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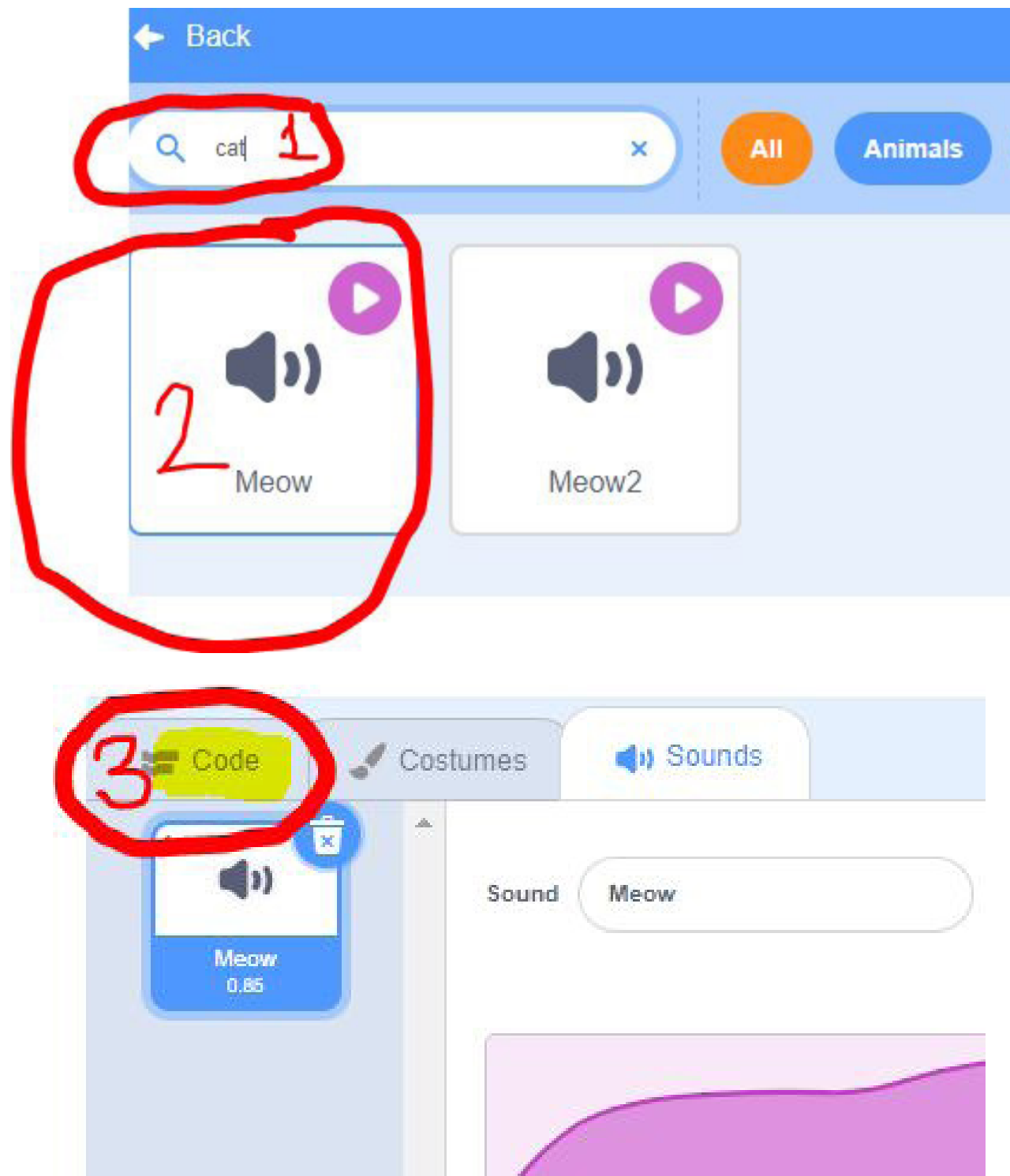
(1) Tap on the “Sound” block category, tap on the “Sound” tab on the top, and go to the bottom of the “Sound” panel to choose “Choose a Sound” icon to insert a cat sound





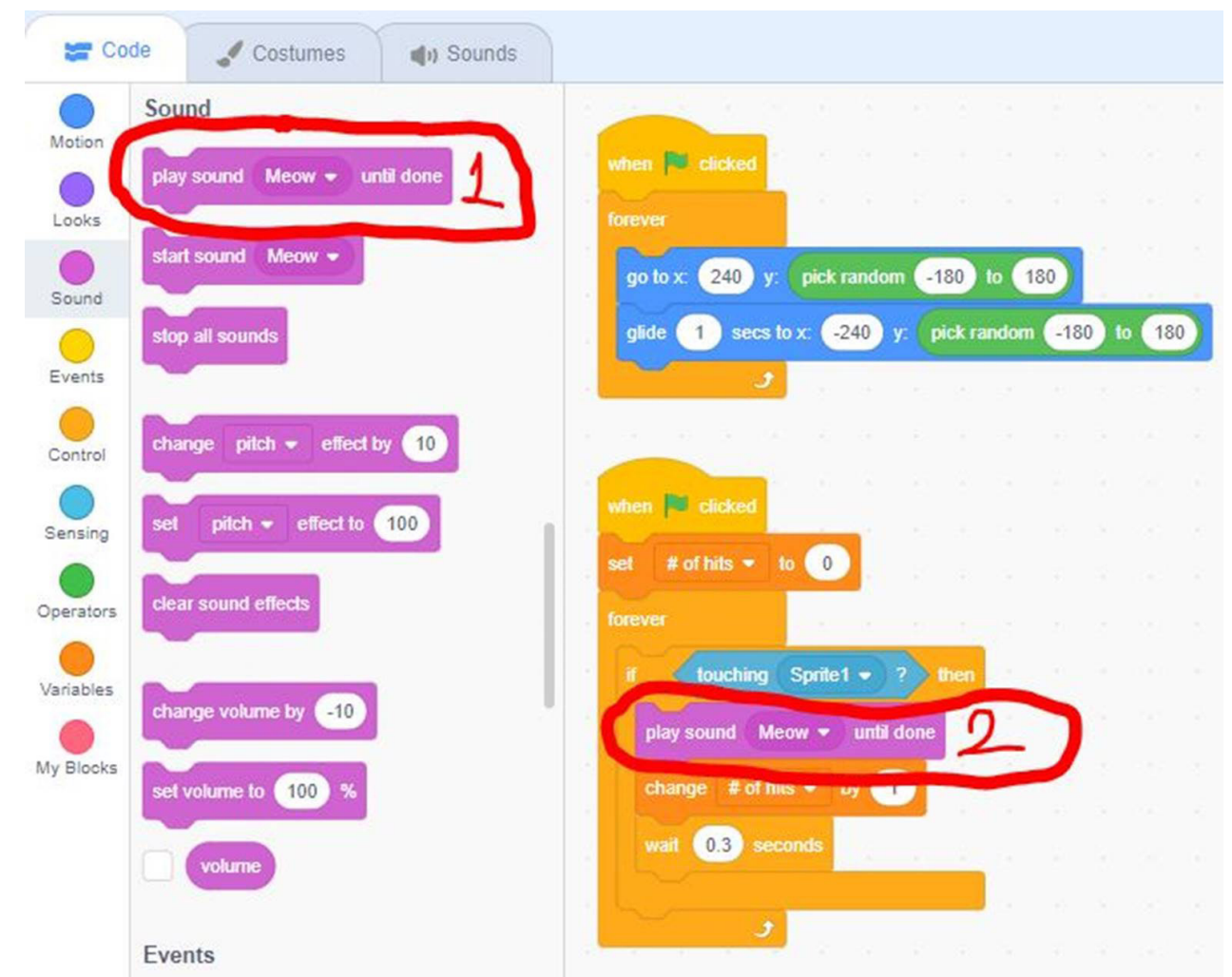
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After choosing "Choose a Sound" icon in the prior step,  
 (1) type in "cat" into the search box to search for sounds in the library related to cats,  
 (2) choose one of these cat sounds, and  
 (3) tap on Code tab to go back to the code block sequences attached to Sprite2 (the ball sprite).



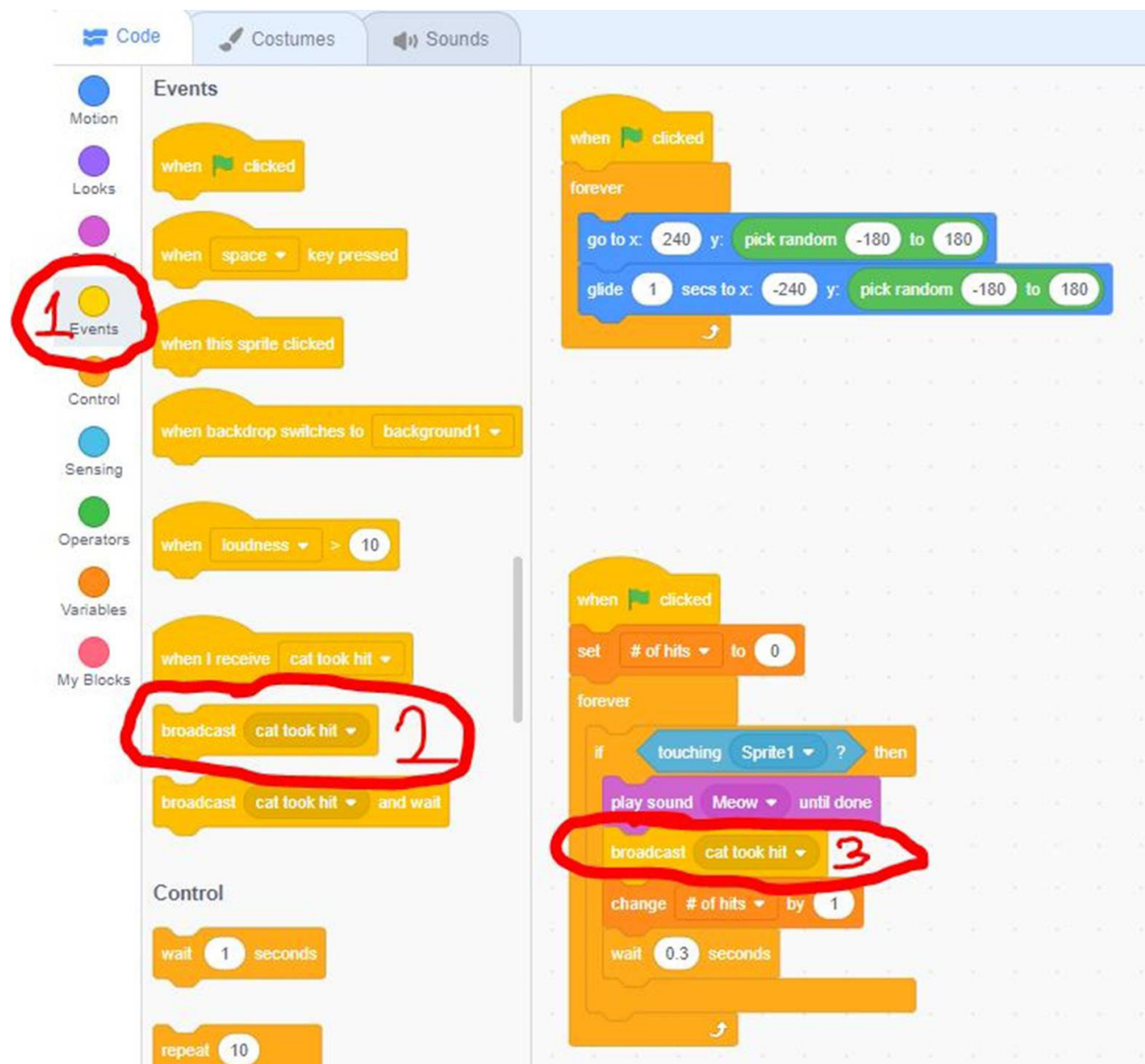
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(1) Grab and drag the "start sound Meow until done" block, and  
 (2) drop it above "change # of hits by 1" block within the second block sequence attached to Sprite2.



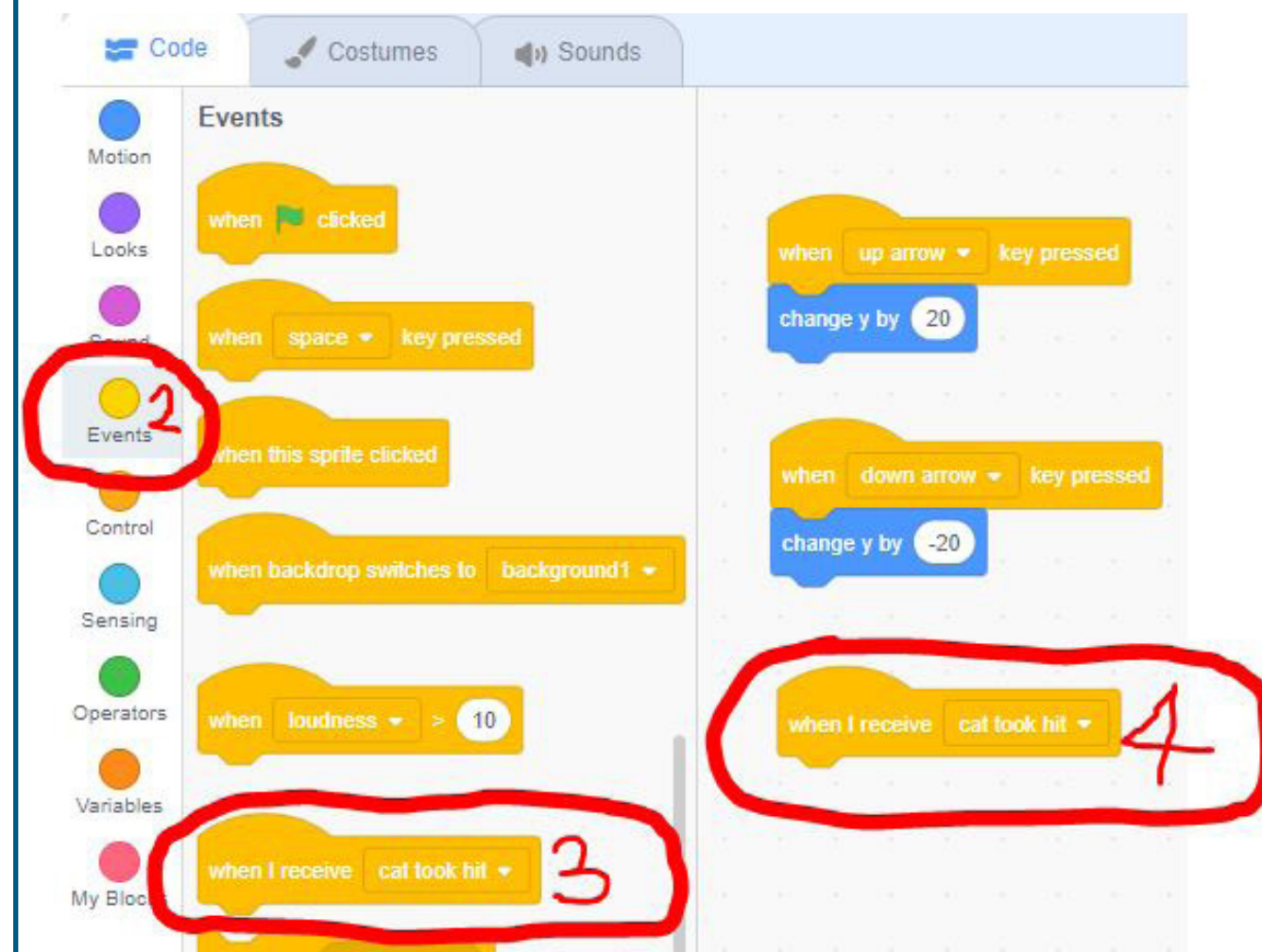
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(1) Tap on "Events" category,  
(2) grab the broadcast" events,  
(3) drop it under "play sound Meow until done" block and create a new broadcast message (i.e., cat took hit).



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(1) Tap on Sprite1 to see the code sequences attached to this sprite,  
(2) in the "Events" category,  
(3) grab and drag "when I receive cat took hit" block, and (4) drop it into the scripting area.





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- (1) Tap on "Looks" block category,
- (2) grab and drag "change color effect by 25" block, and
- (3) drop it under "when I receive cat took hit" block.

The image shows the Scratch code editor interface. On the left, the 'Looks' block category is selected and highlighted with a red circle and the number '1'. In the center, the 'Looks' block palette is visible, containing various blocks like 'say Hello! for 2 seconds', 'say Hello!', 'think Hmm... for 2 seconds', 'think Hmm...', 'switch costume to costume2', 'next costume', 'switch backdrop to background1', 'next backdrop', 'change size by 10', 'set size to 100 %', and 'change color effect by 25'. The 'change color effect by 25' block is highlighted with a red circle and the number '2'. On the right, the script area shows three blocks: 'when up arrow key pressed', 'change y by 20', 'when down arrow key pressed', 'change y by -20', and 'when I receive cat took hit'. The 'when I receive cat took hit' block is highlighted with a red circle and the number '3', and the 'change color effect by 25' block is being dragged into the script area below it.