Interactions

1
Go to the Scratch at https://scratch.mit.edu/

http://scratch.mit.edu

https://scratch.**mit**.edu

2
Sign into your account.

Join Scratch   Sign in

Join Scratch   Sign in
Username
Password
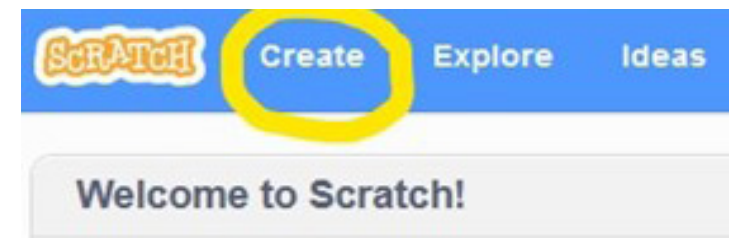Sign in   Need help?
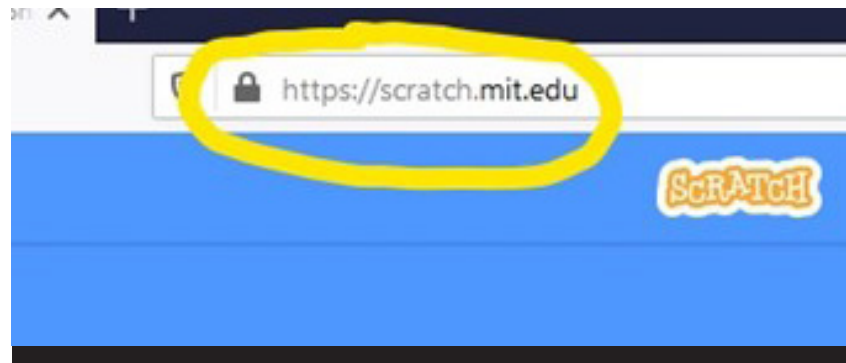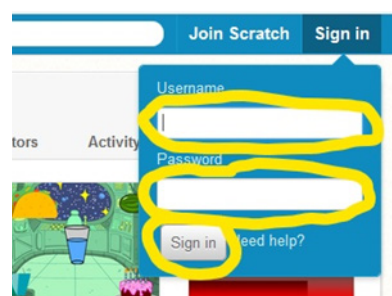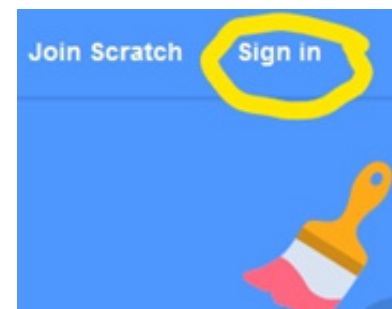
3
Tap "Create" to create a Scratch program for one of the following nine interactive puzzles (Puzzle #5 will be completed in this handout).

Create   Explore   Ideas

Welcome to Scratch!

- ❏ **PUZZLE 1:** Whenever you press the B key, the sprite gets a little bigger. Whenever you press the S key, the sprite gets a little smaller.

- ❏ **PUZZLE 2:** Whenever the sprite hears a loud sound, it changes color.

- ❏ **PUZZLE 3:** Whenever the sprite is in the top 25% of the screen, it says "I like it up here."

- ❏ **PUZZLE 4:** When the sprite touches something blue, it plays a high note. When it touches something red, it plays a low note.

- ❏ **PUZZLE 5:** Whenever two sprites collide, one of them says: "Excuse me."

- ❏ **PUZZLE 6:** Whenever the cat sprite gets near the dog sprite, the dog turns and runs from the cat.

- ❏ **PUZZLE 7:** Whenever you click on the background, a flower appears at that spot.

- ❏ **PUZZLE 8:** Whenever you click on a sprite, all other sprites do a dance.

- ❏ **PUZZLE 9:** Whenever you move the mouse-pointer, the sprite follows but doesn't touch the mouse-pointer.
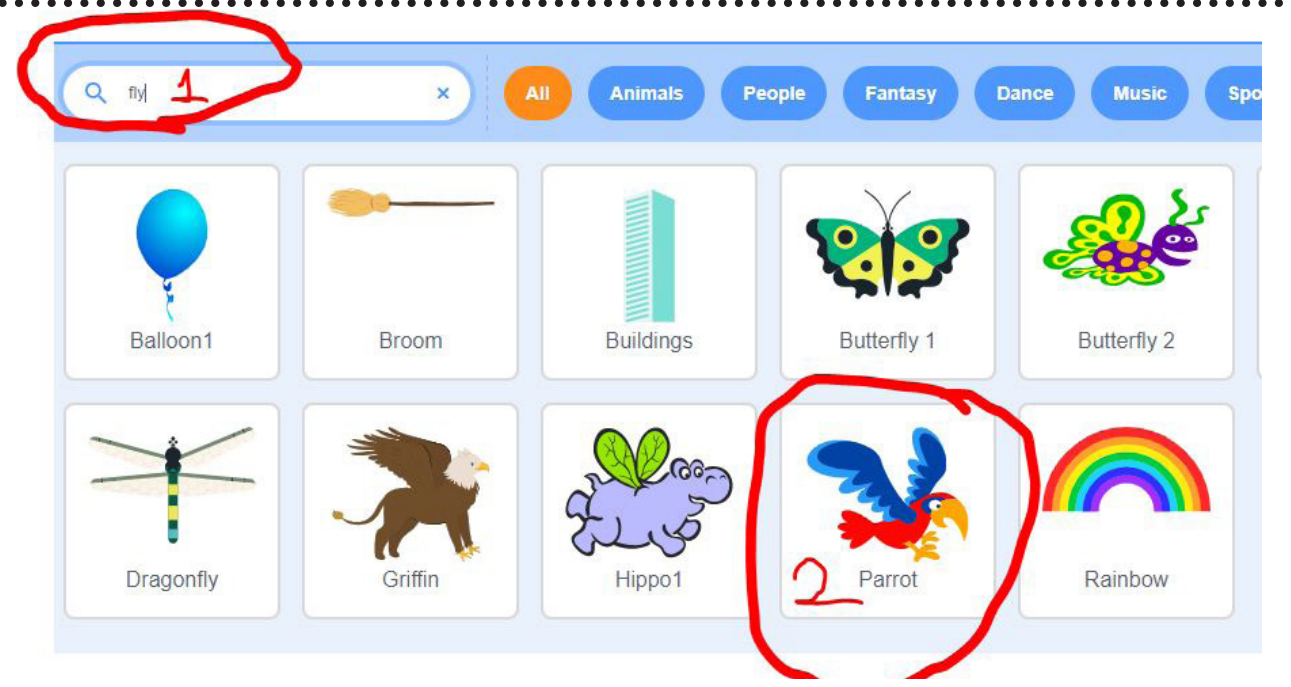
4

(1) Tap on the trash icon on the top right corner of Sprite1 to delete Sprite1, and
(2) go over the "Choose a Sprite" icon on the bottom right corner of the Sprite panel to choose a new sprite.
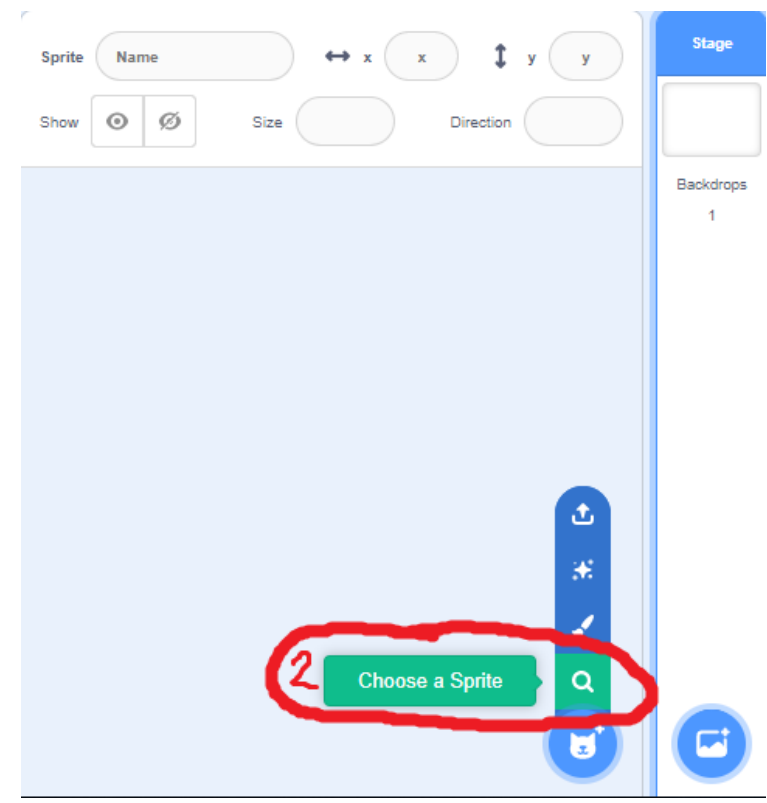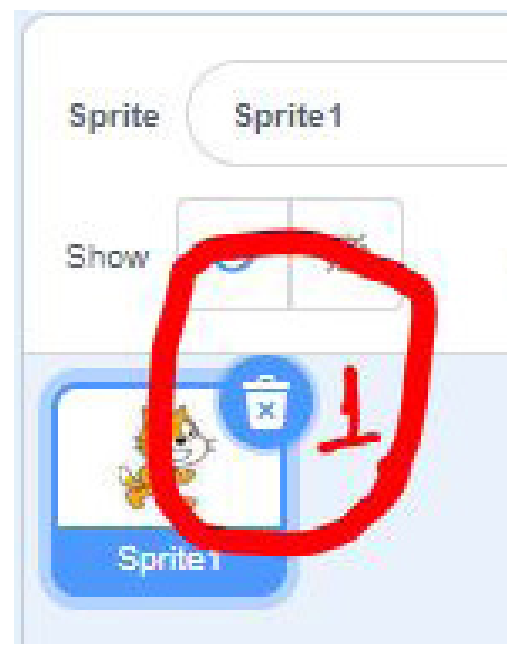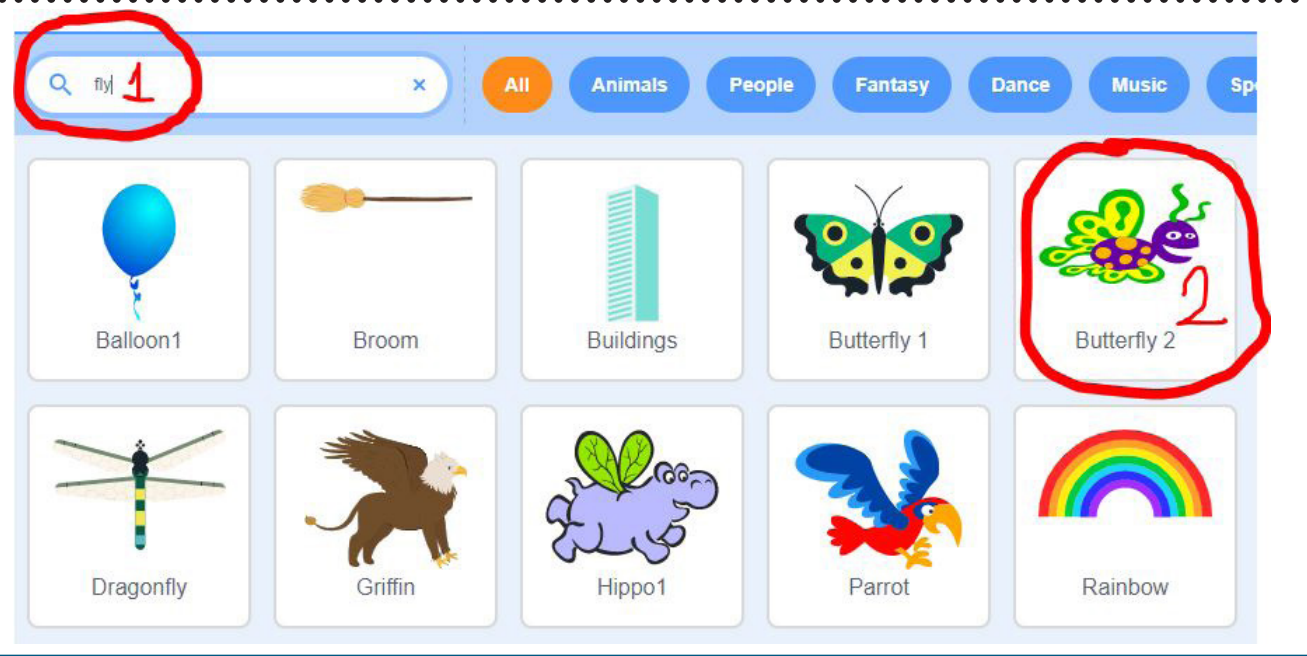

5

(1) type "fly" in the search bar to list the sprites in the library that are related to fly, and
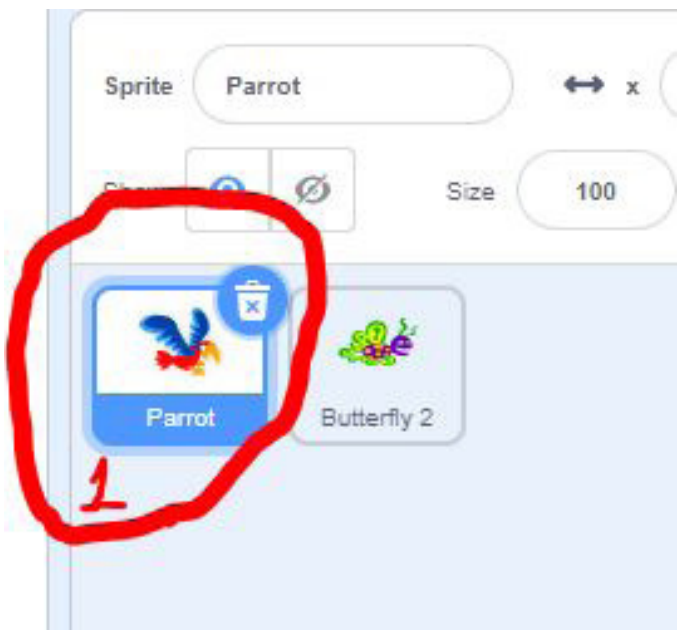**(2) choose one of the characters.**

6

(1) Type "fly" in the search bar again, and
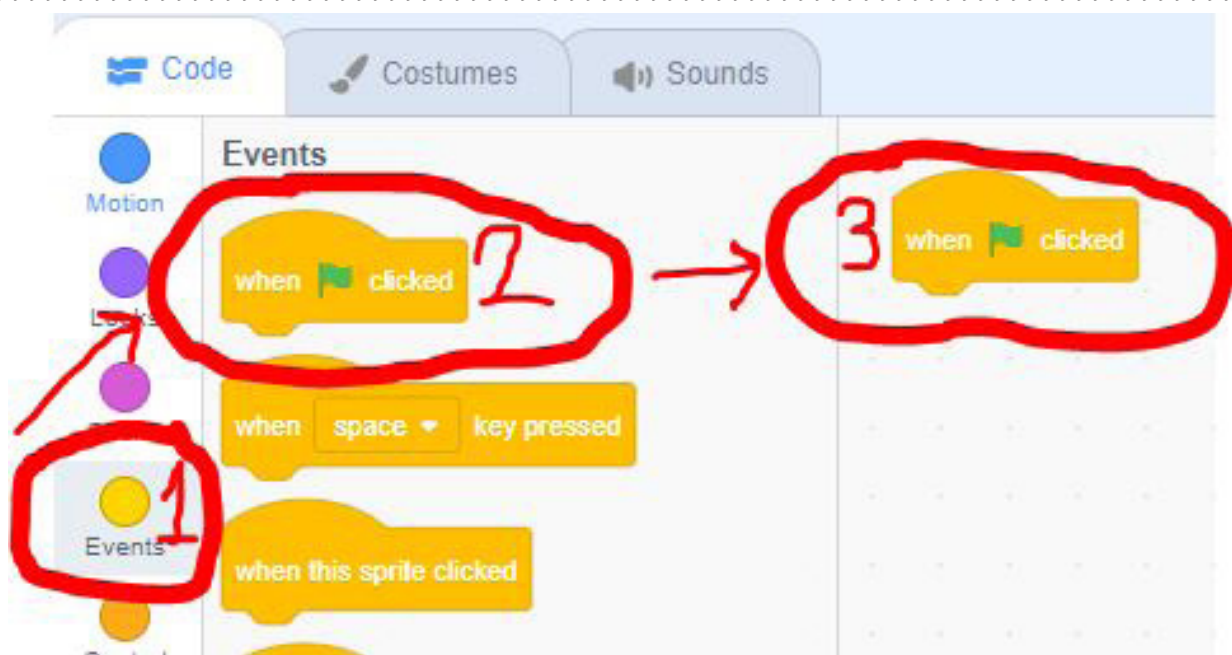**(2) choose another character.**

7

(1) Tap on the Parrot sprite to attach code blocks into this sprite.
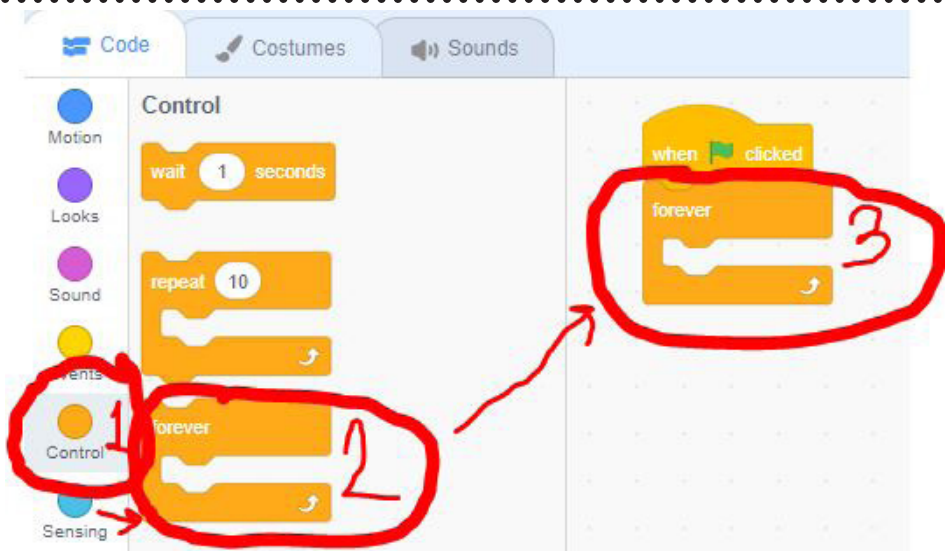

8

**(1) Tap on "Events" category,
(2) grab and drag "When green flag clicked" block, and (3) drop it into the scripting area.**
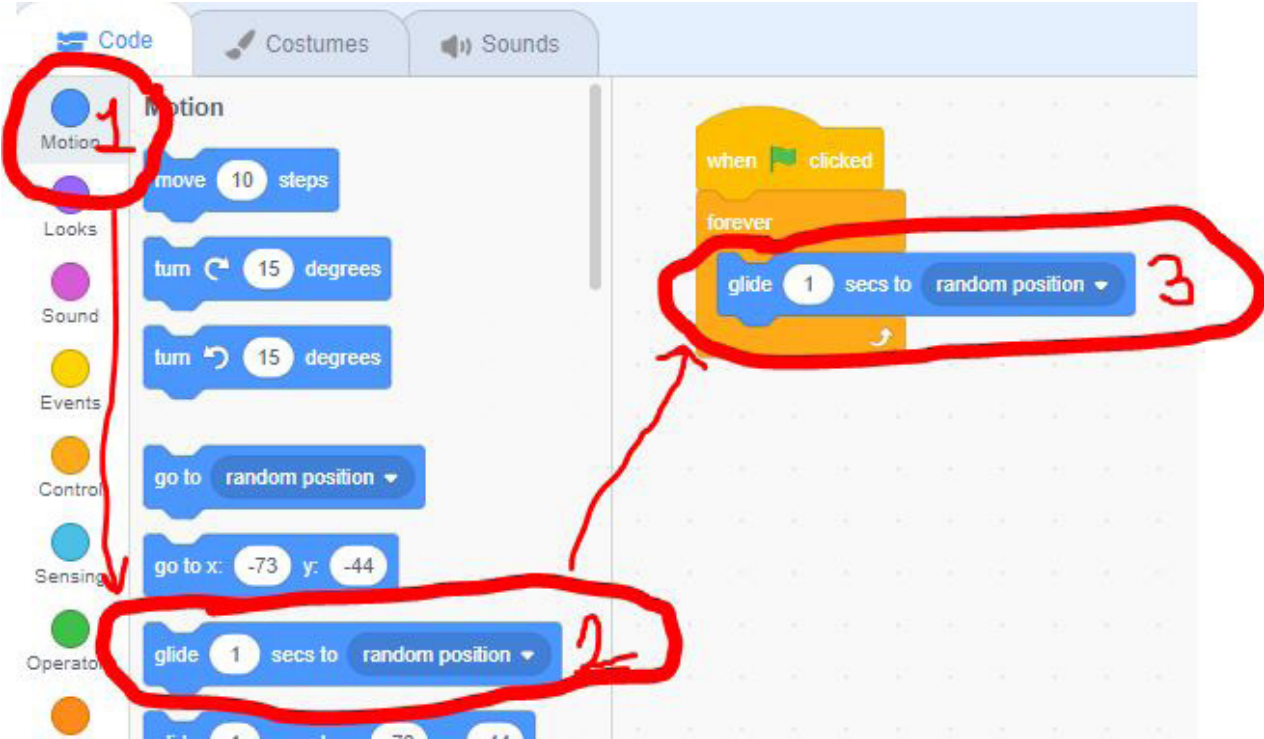

9

**1) Tap on "Control" category,
(2) grab "forever" block, and
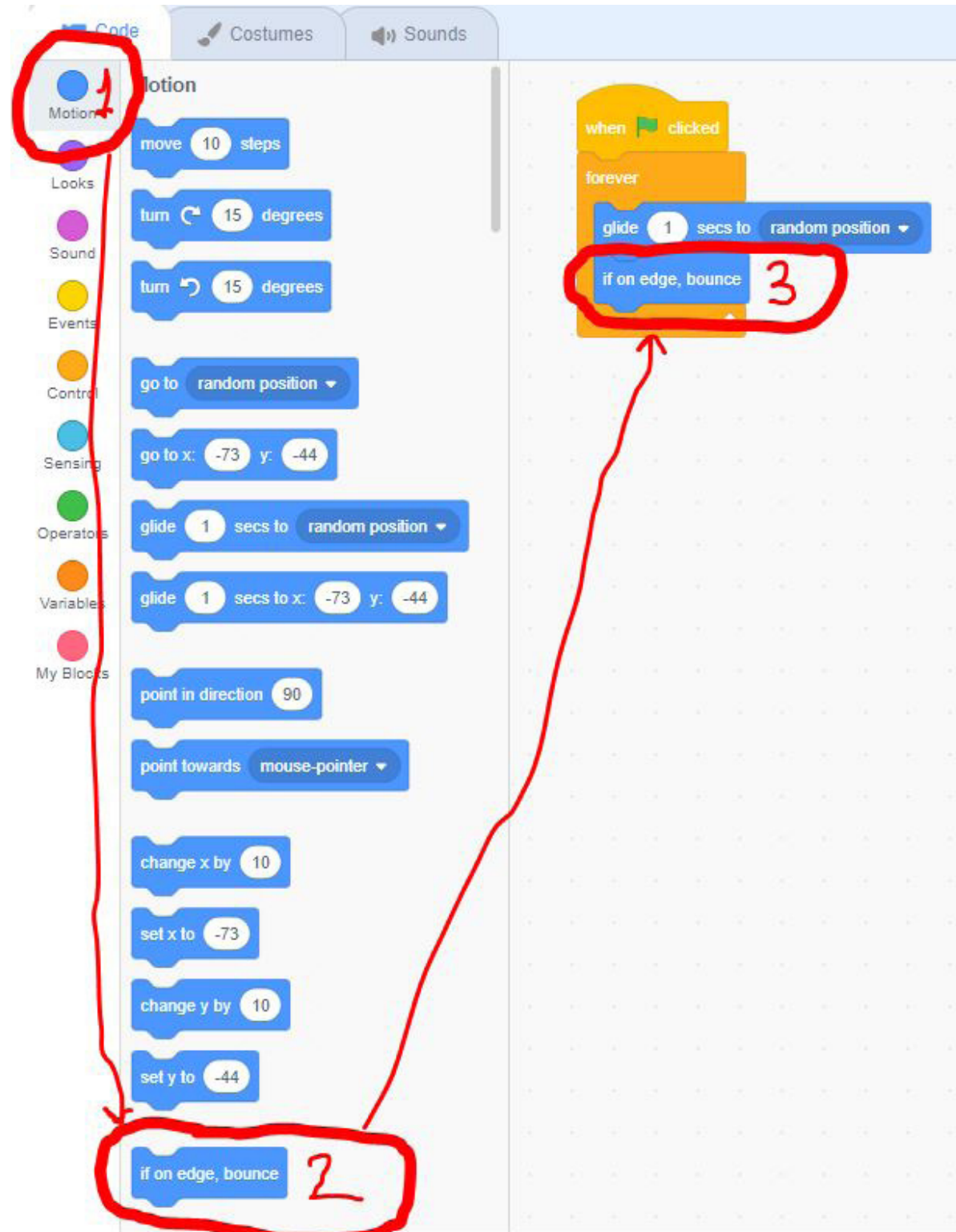(3) drag and drop it under "when green flag clicked" block.**

10

**(1) Tap on the "Motion" block category,
(2) grab "glide 1 secs to random position" block, and
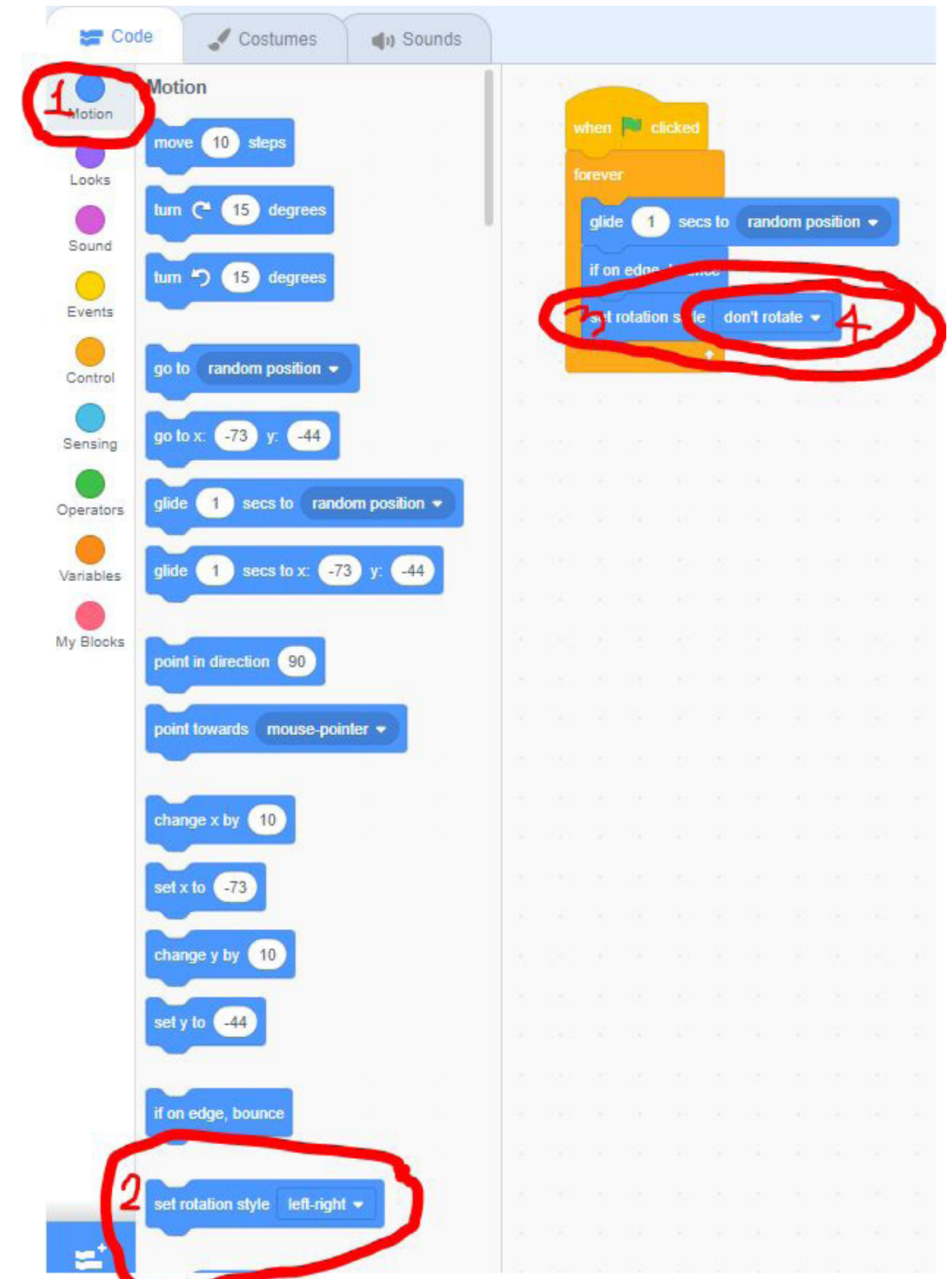(3) drag and drop it into the "forever" block.**

11 (1) Motion category is still selected,
(2) grab "if on edge, bounce" block, and
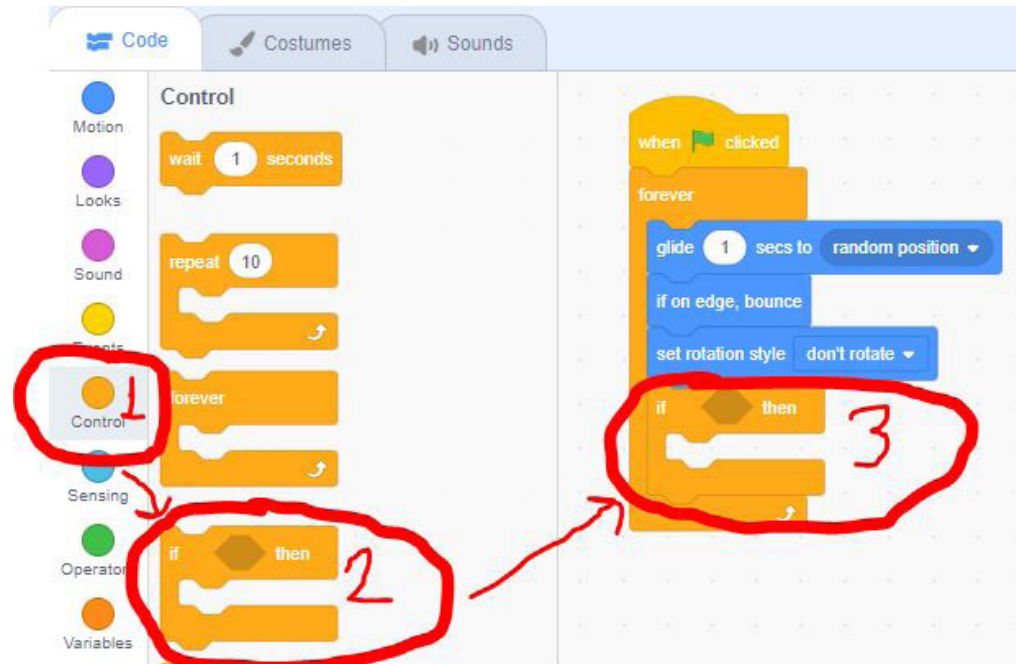(3) drag and drop it under "glide 1 secs to random position".

12 (1) Motion category is still selected,
(2) grab "set rotation style left-right" block,
(3) drag and drop it under "if on edge bounce" block, and
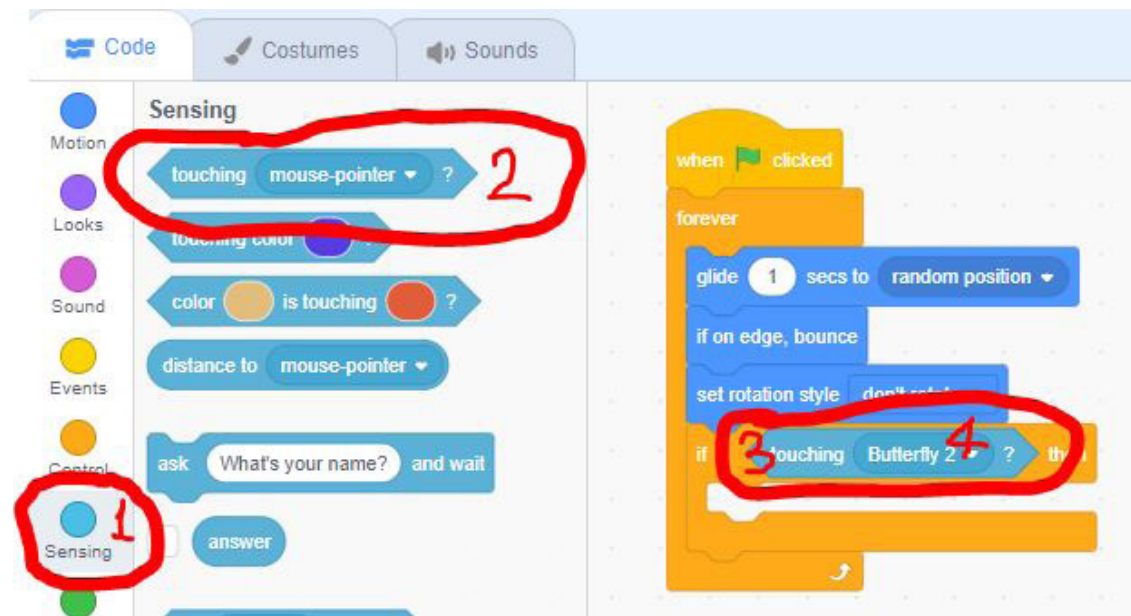(4) tap on the drop-down menu for this block to change it to "don't rotate.

13 (1) Tap on "Control" category,
(2) grab the "if-then" block,
(3) drag and drop it under "set rotation style don't rotate" block.

14 (1) Tap on "Sensing" block category,
(2) grab "touching mouse-pointer" block,
(3) drag and drop it into the "if-then" block, and
(4) tap on the drop-down menu to change it to "Butterfly 2"

15 (1) Tap on "Looks" block category,
(2) grab and drag "say Hello! For 2 seconds" block,
(3) drag and drop it into "if touching Butterfly 2 then" block, and
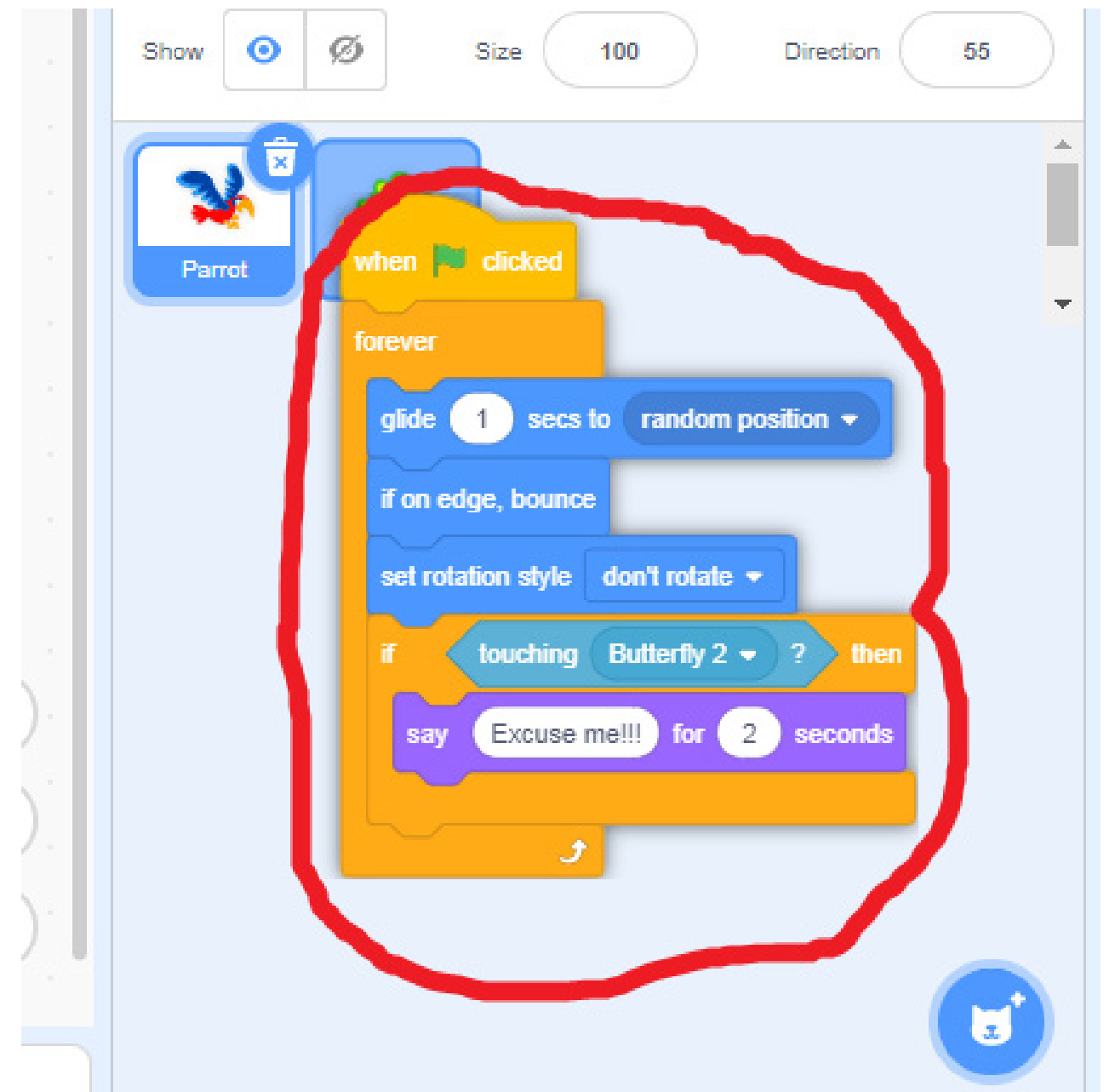(4) change the 'Hello!' text to 'Excuse me!!!'
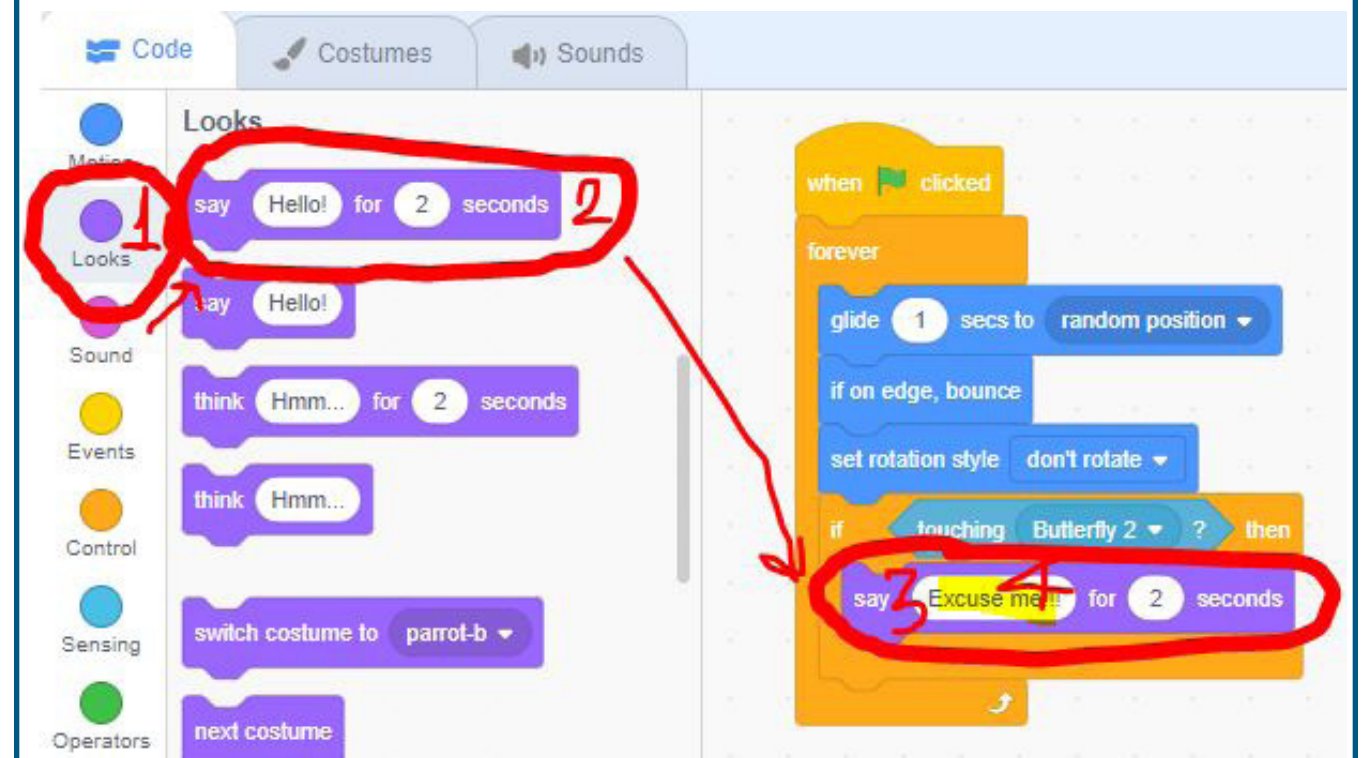
16 (1) Go over "when green flag clicked" block, right click, choose Duplicate, (2) and go somewhere empty on the scripting area and tap/click to put the duplicate block-sequence into this spot.
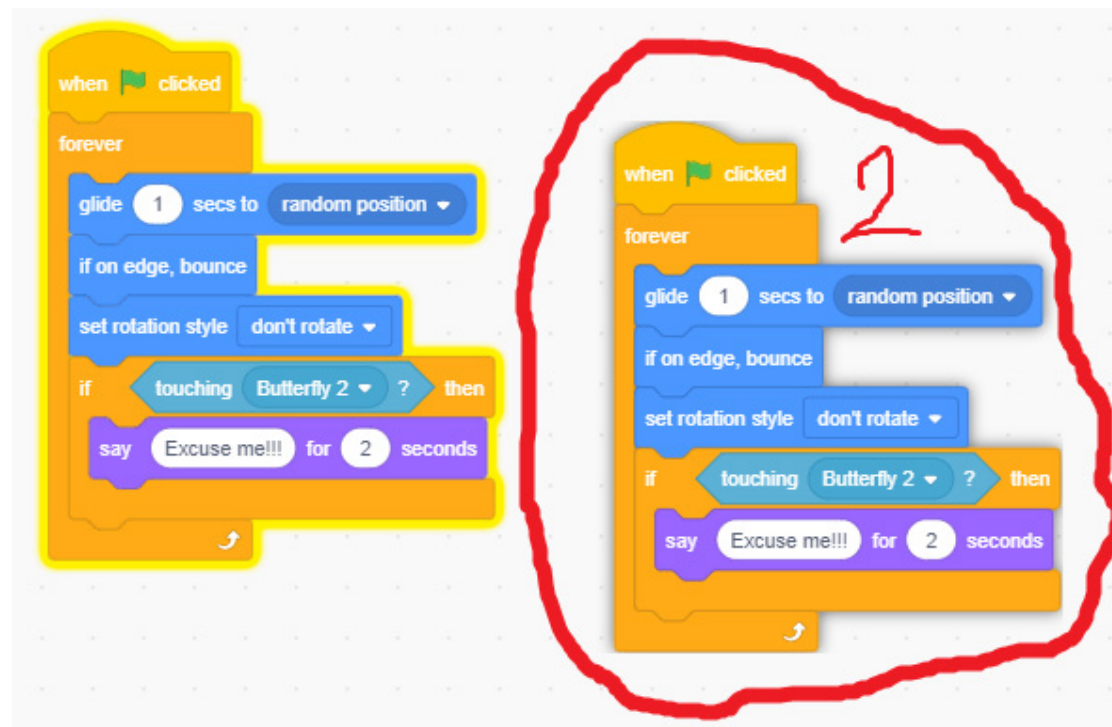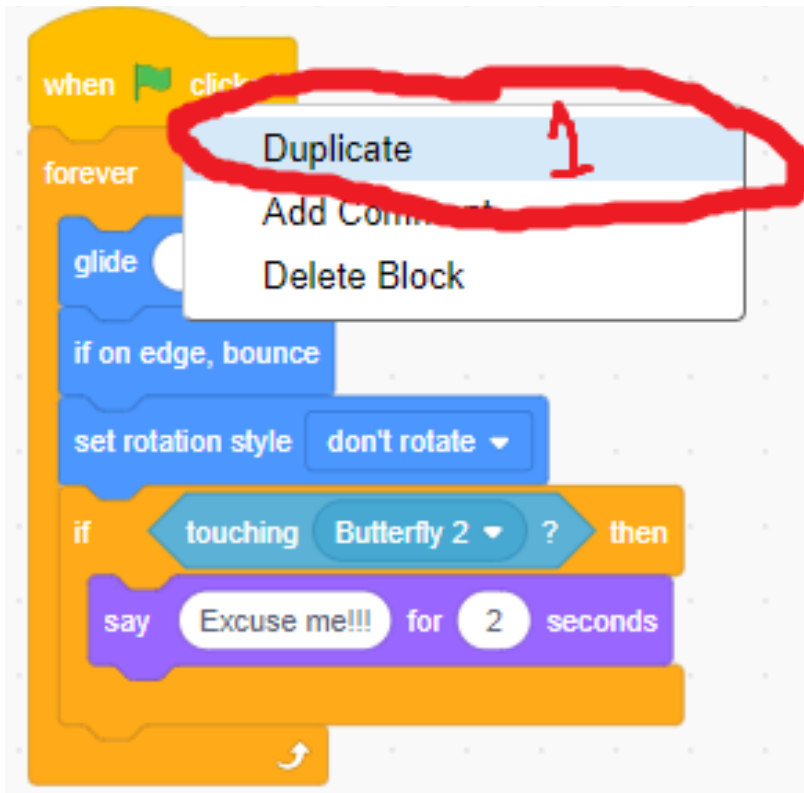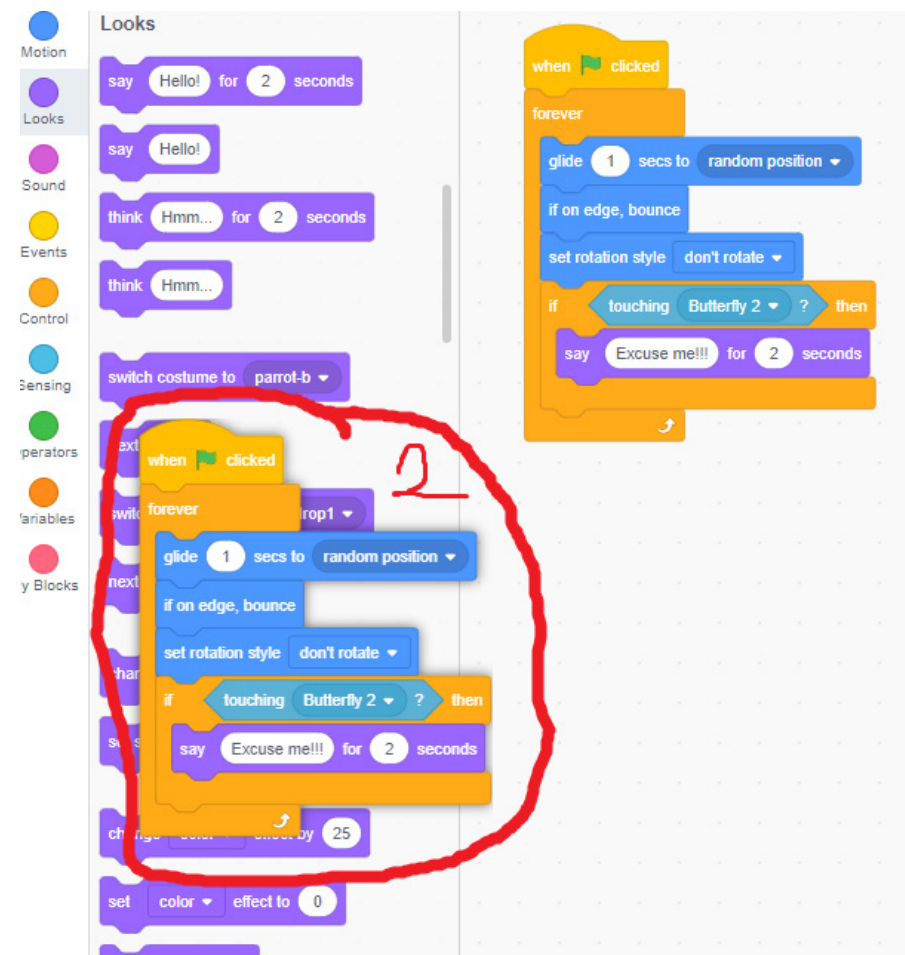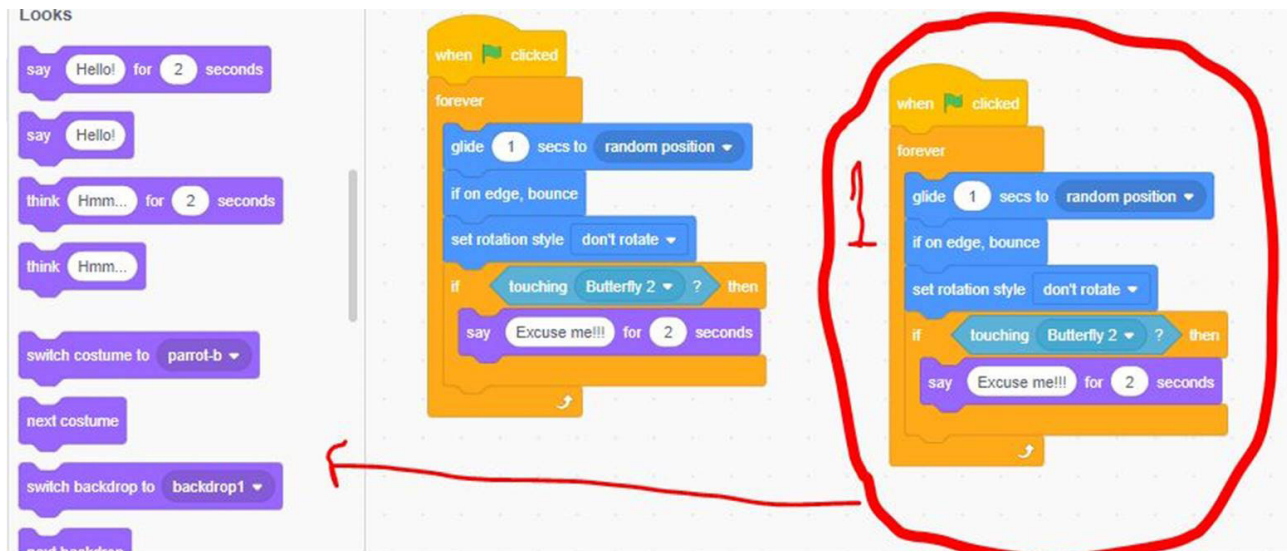

17 Grab the duplicated sequence from the scripting area, drag and drop it over the Butterfly 2 sprite.

18

(1) Grab the duplicated block sequence on the Parrot sprite, drag and drop it into the code blocks area to delete this duplicate sequence from the Parrot sprite.

19

(1) Tap on "Butterfly 2" to select this sprite,
(2) tap on Costumes tab to see the 2 Costumes for this sprite,
(3) select the first costume,
(4) tap on "Flip Horizontal" to flip the first costume horizontally,
(5) tap on the second costume for this sprite to select, and
(6) tap on "Flip Horizontal" to flip the second costume horizontally, and
(7) tap on "Code" tab to go back to the code blocks for this sprite.
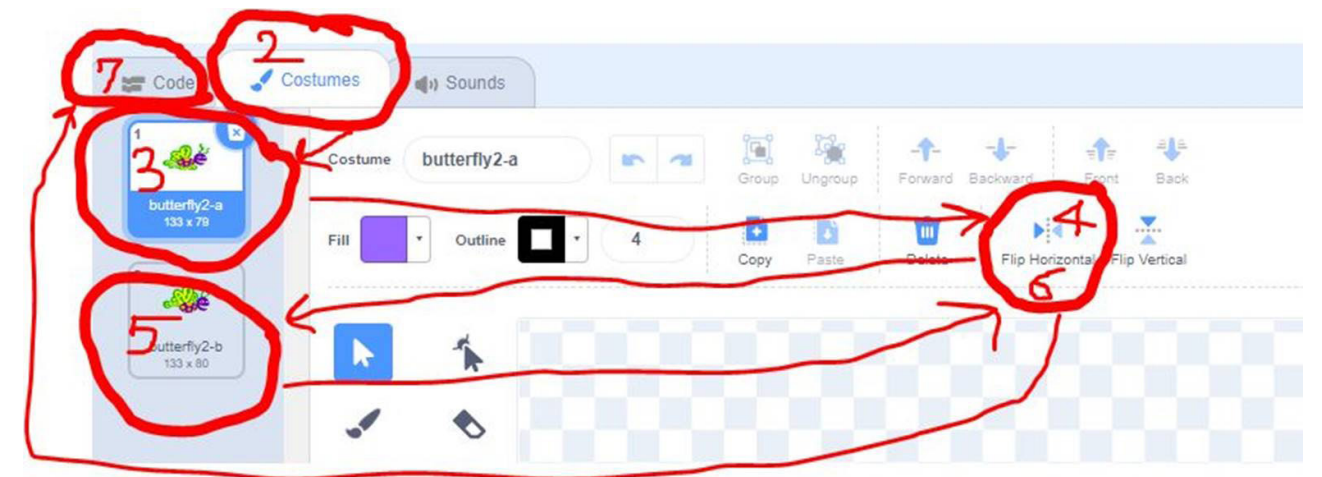
20 (1) Grab the "if touching Butterfly 2 then" block,
(2) drag and drop it into the code block area to delete this block and all blocks inside this if conditional block.