A Leap for Mankind – Step-by-Step Walkthrough
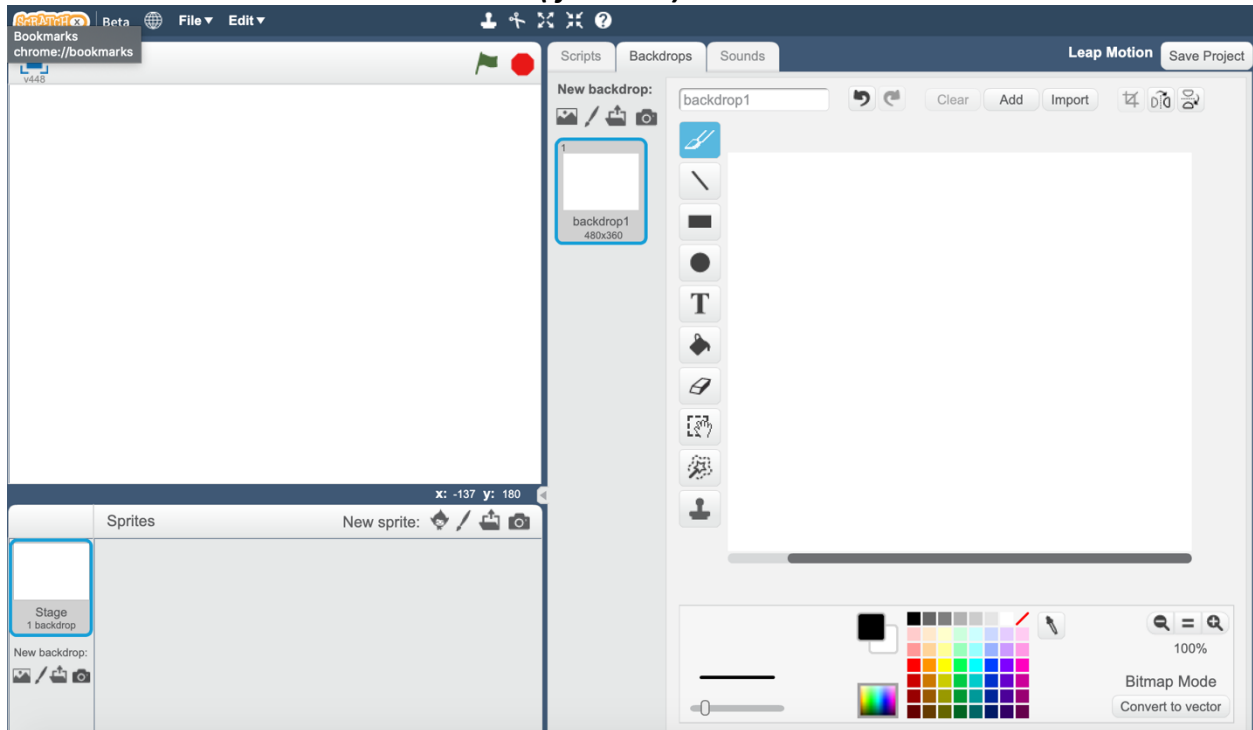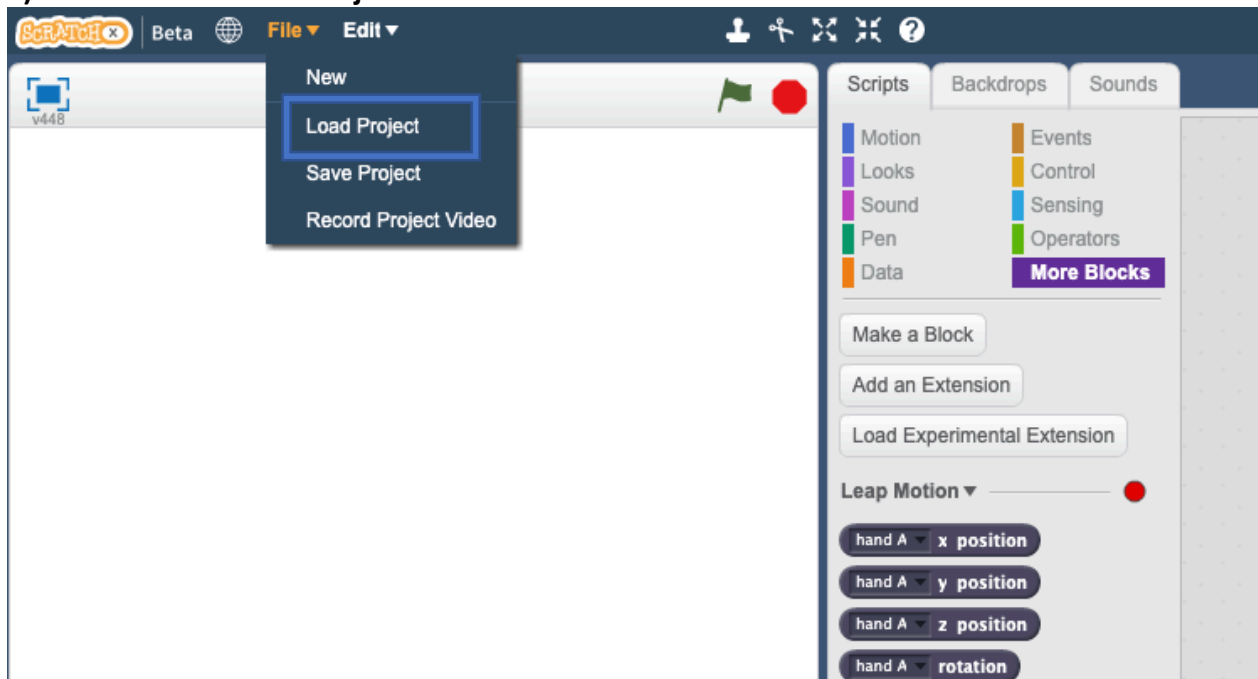
1) [Open the link to ScratchX (use Google Chrome)](...)
Enable Adobe Flash and restart Chrome *(if needed).*
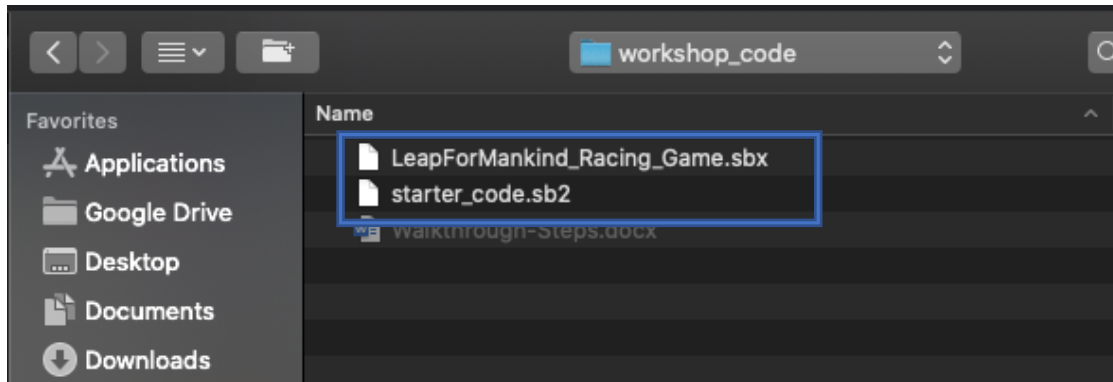
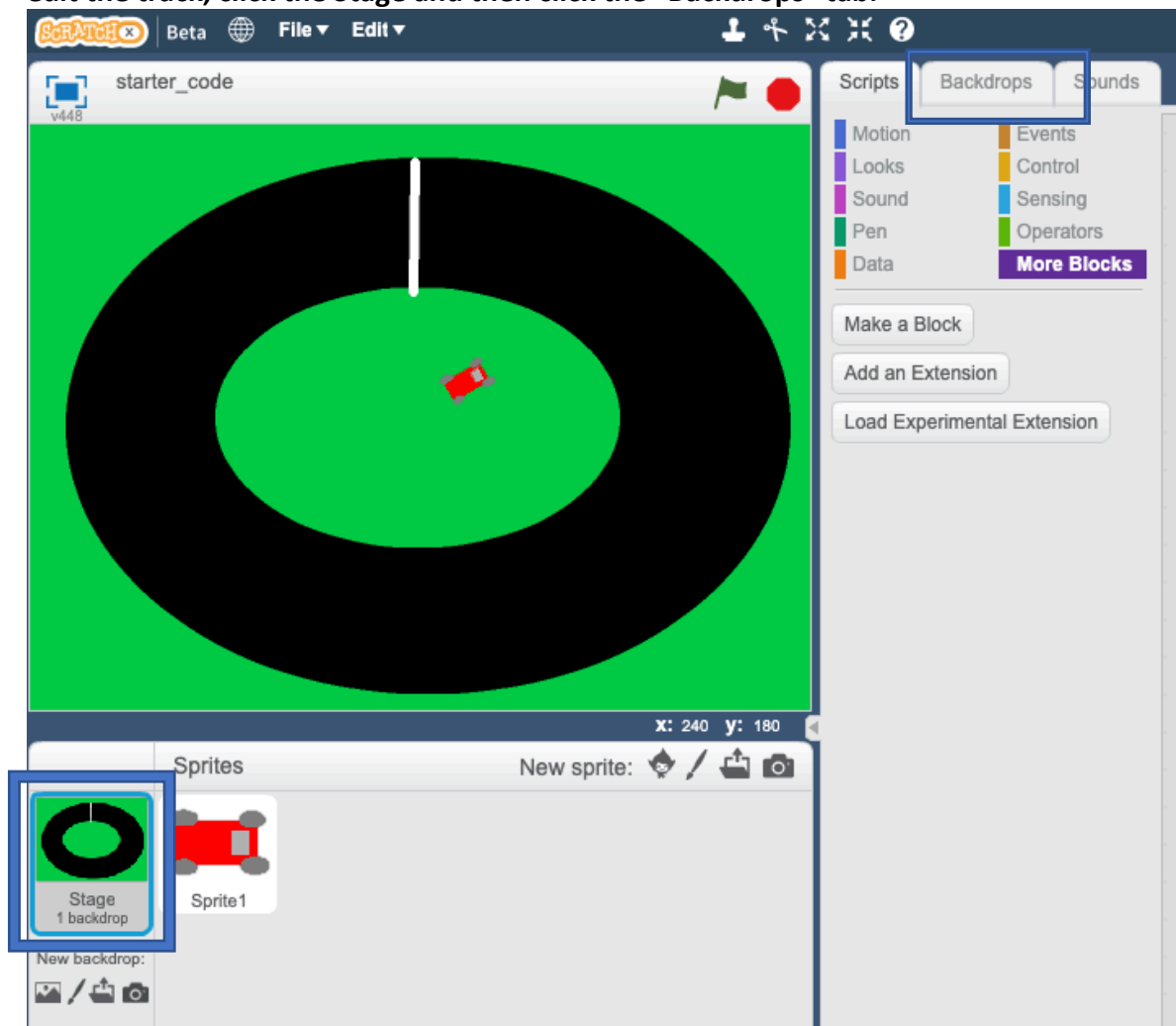**2) Click "File" -> "Load Project"**

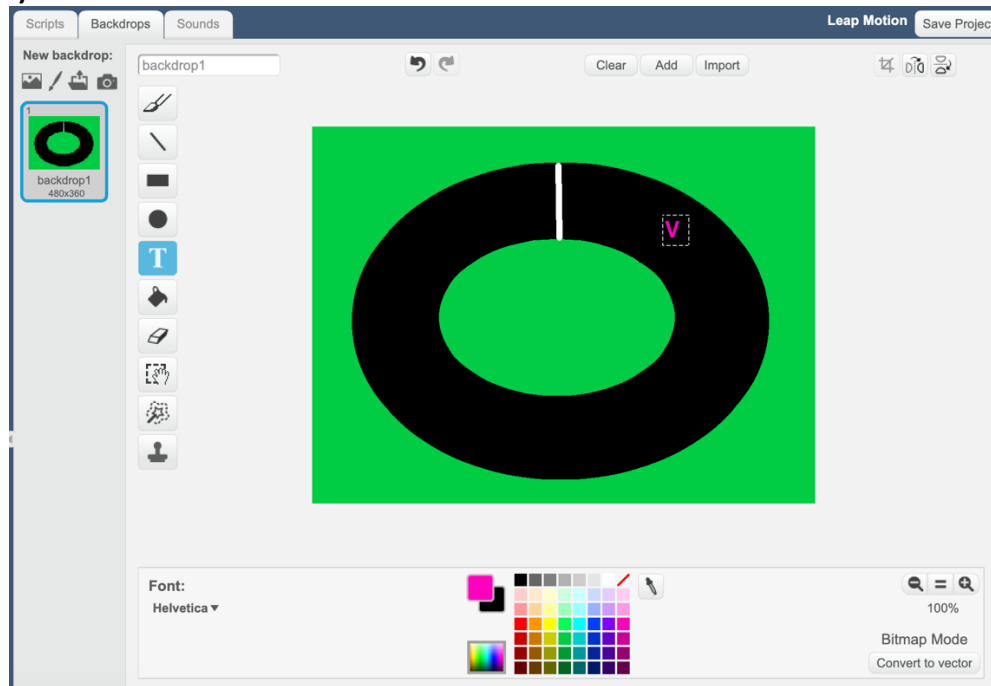**3) Open the appropriate file:**

     LeapForMankind_Racing_Game.sbx - **to play the full game**
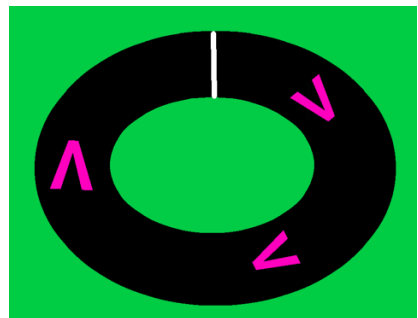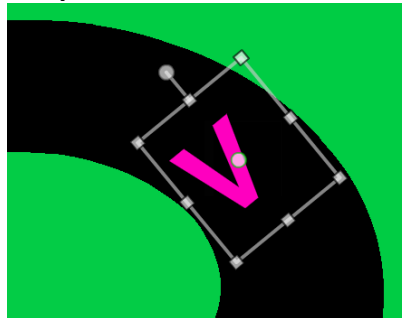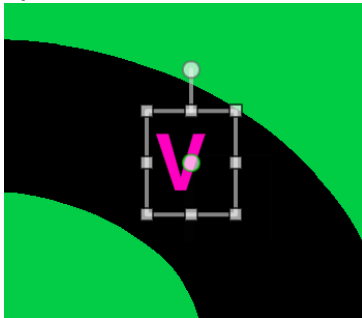   *starter_code.sb2* - **for the class workshop.**

4) If you opened starter_code.sb2, you should now have a basic racing track and a red car. To edit the track, click the Stage and then click the "Backdrops" tab.
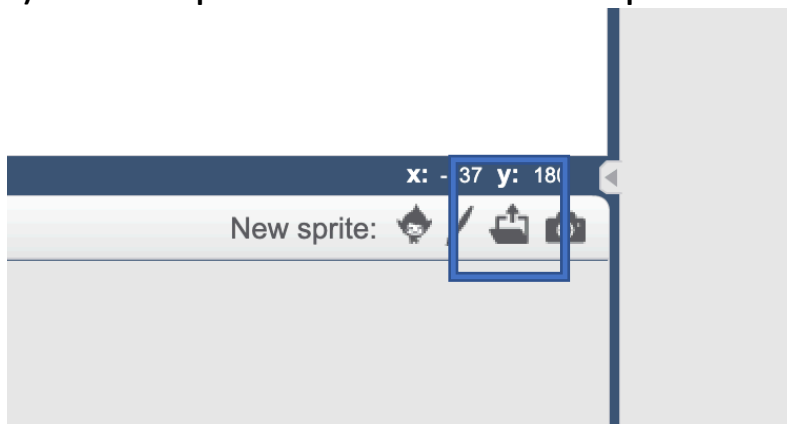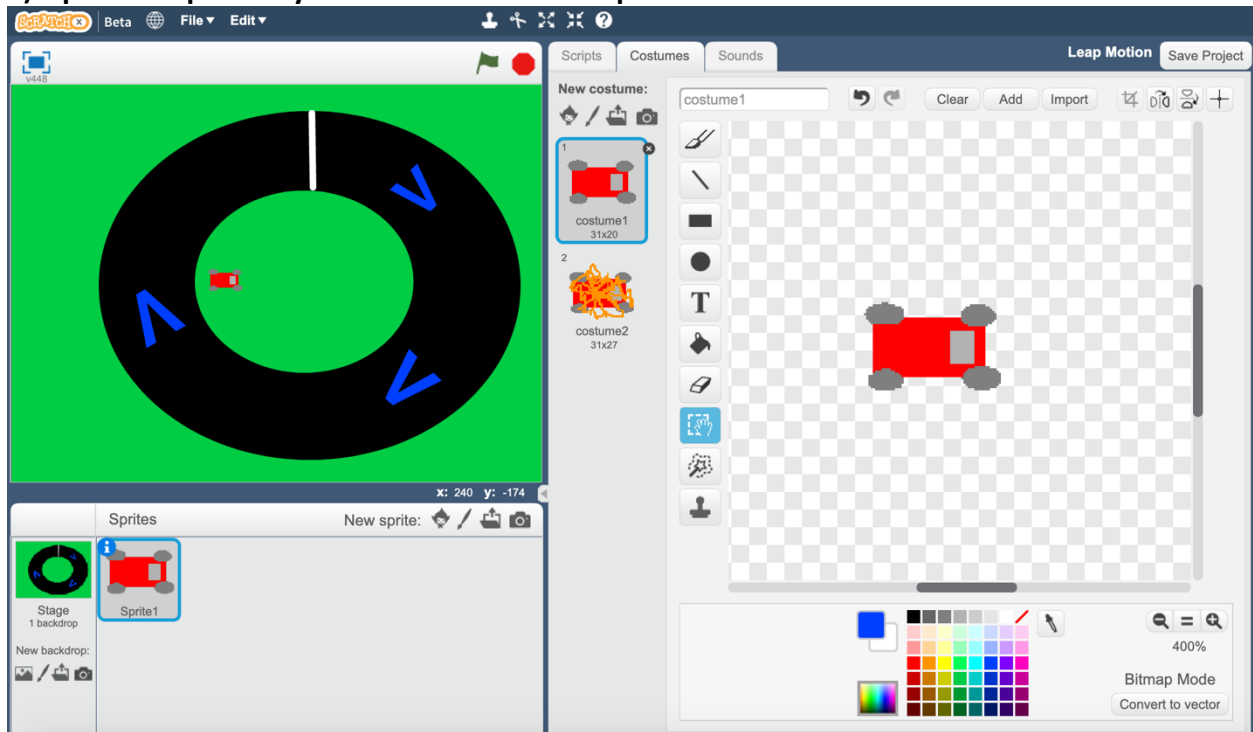
5) Switch to the text tool

6) Create a blue ' V ', resize it and place it on the track
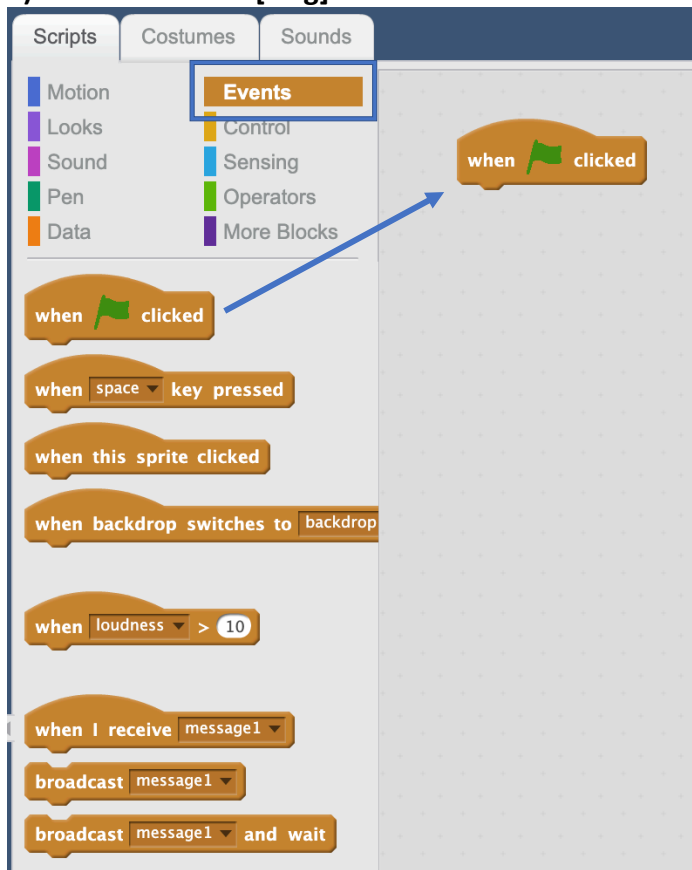

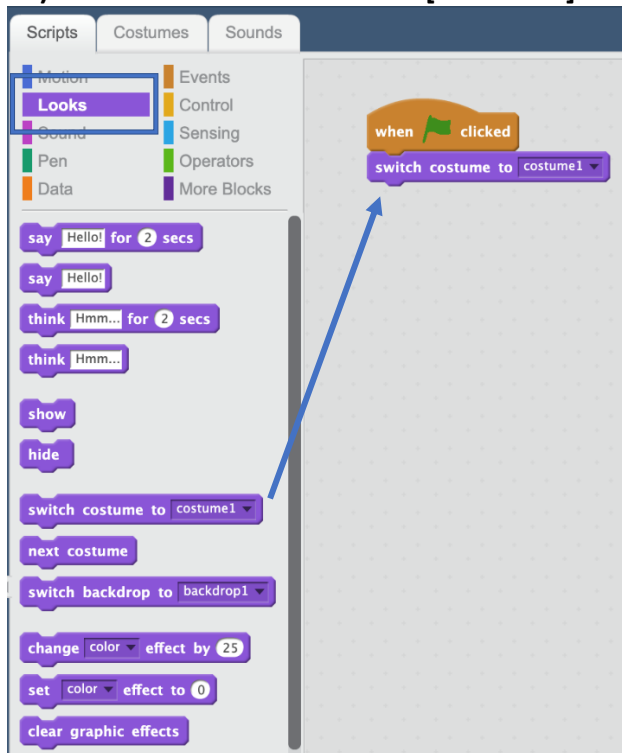**7) Click the "Open" button on the left window pane**

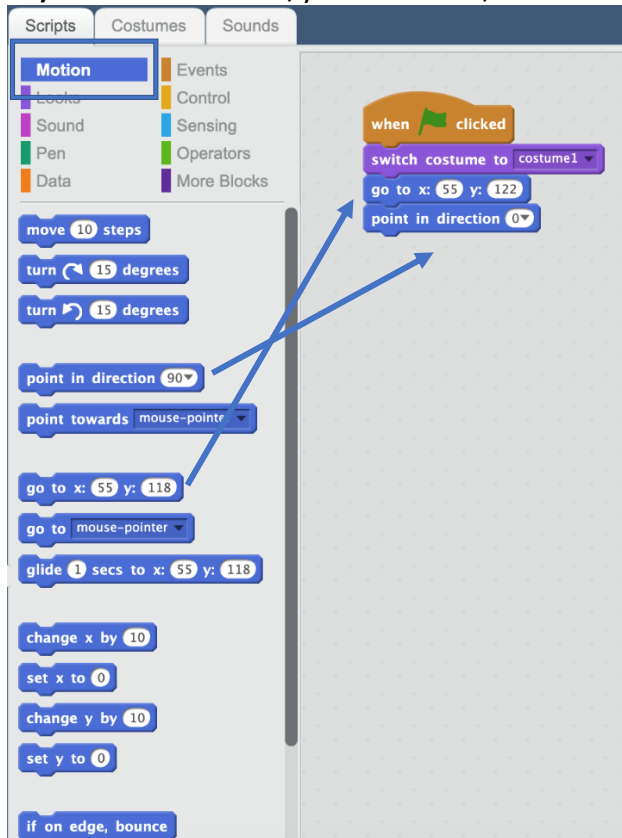## 8) Open the Sprite of your choice in the file explorer
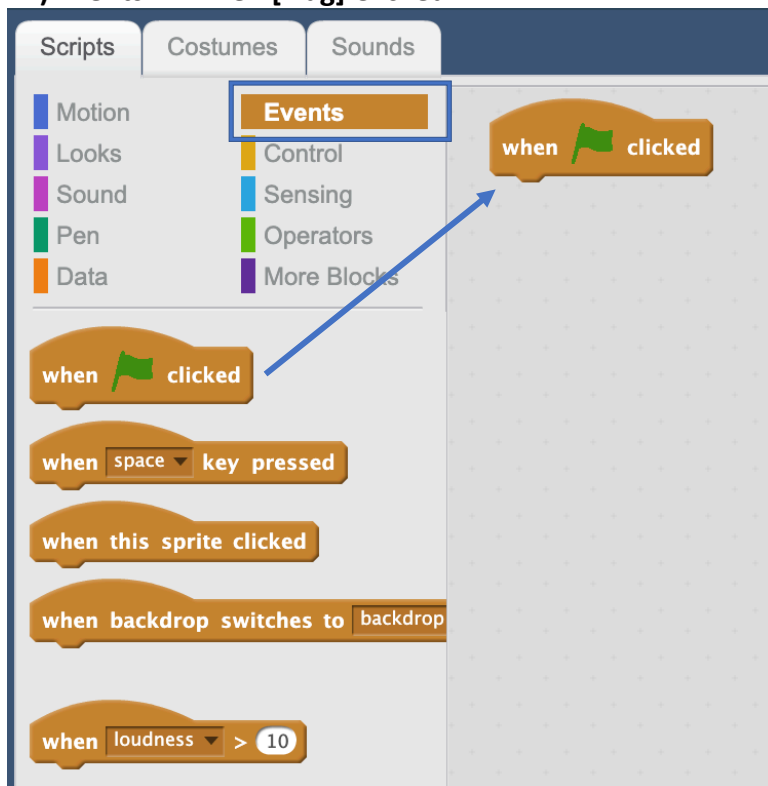

9) Events -> When [Flag] Clicked

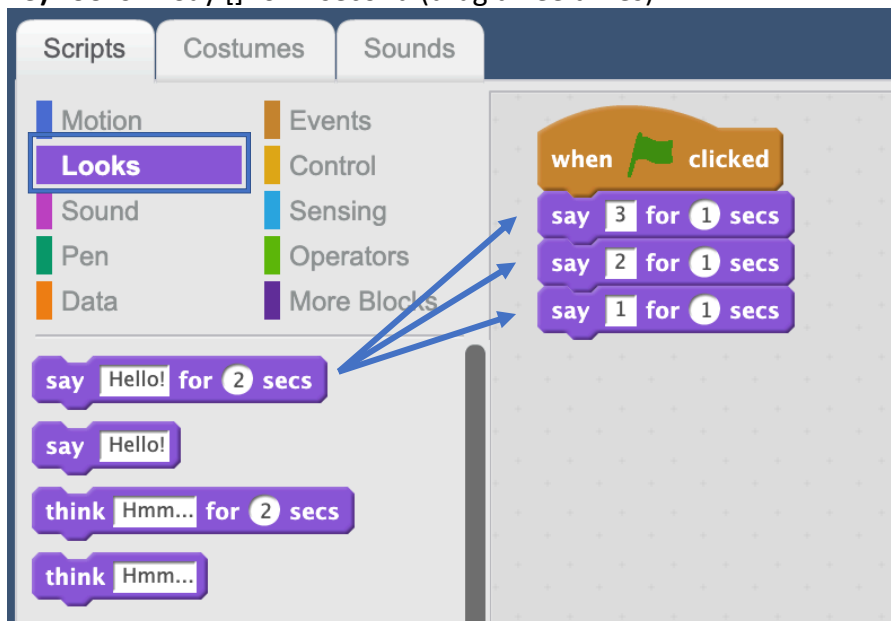**10) Looks -> Switch costume to [costume1]**

11) Motion -> Go to x/y coordinates / **Motion ->** Point in direction 90 (right)
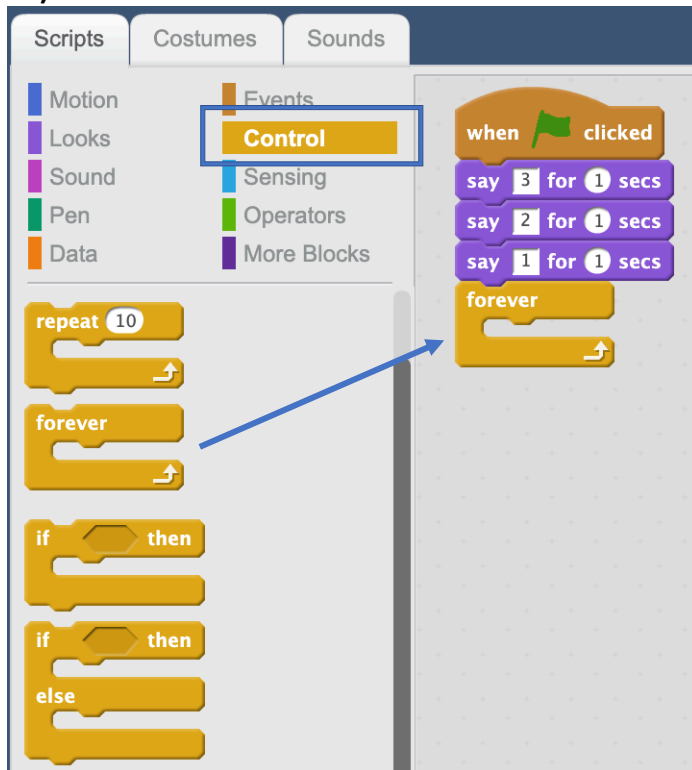
12) Events -> When [Flag] Clicked
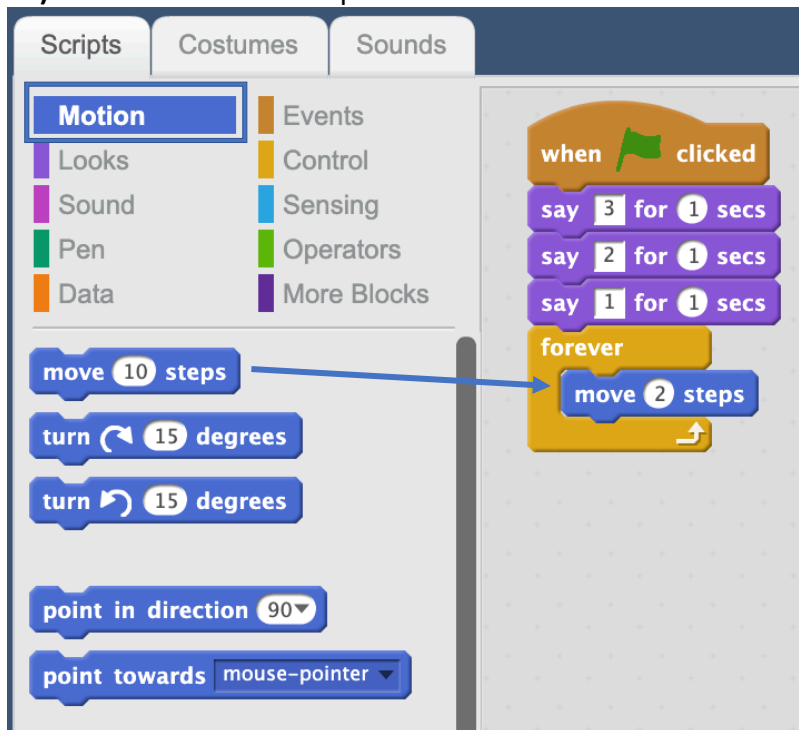

13) Looks -> Say [] for 1 second (drag three times)

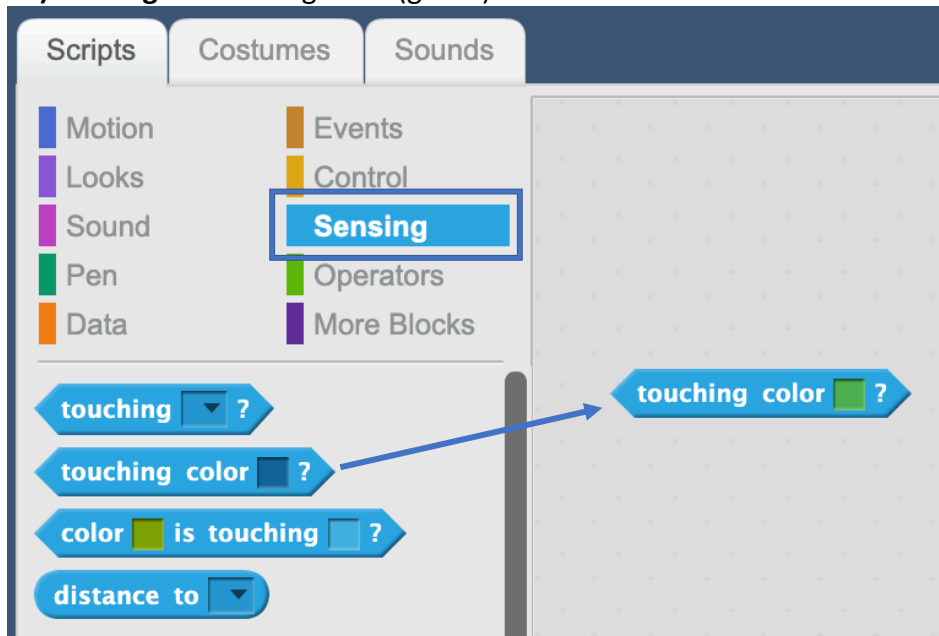**14) Control -> Forever**

15) Motion -> Move 2 steps

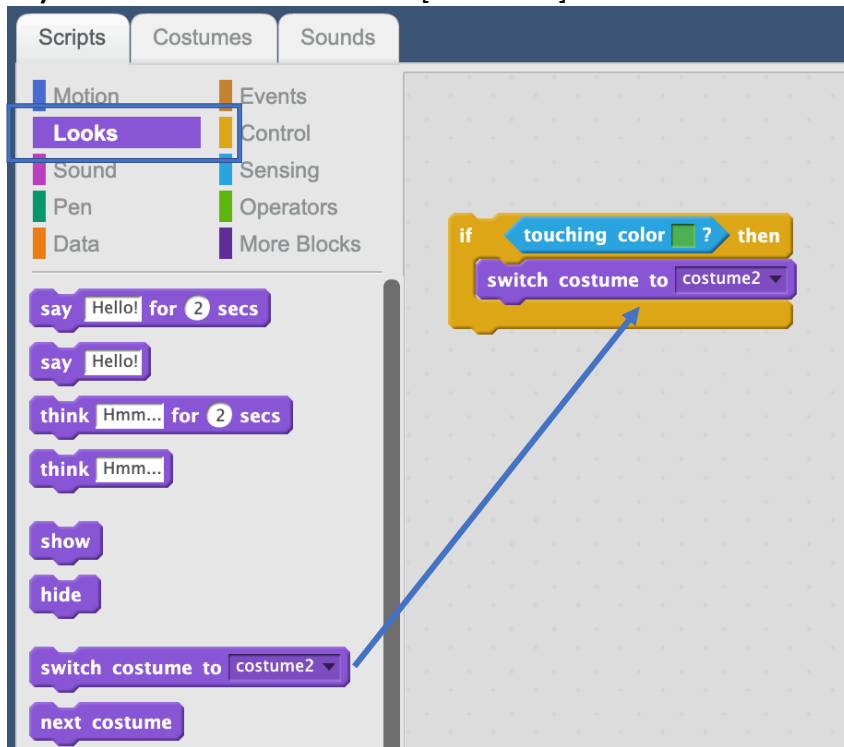**16) Sensing ->** Touching color (green) -> click the "color" box then click the background

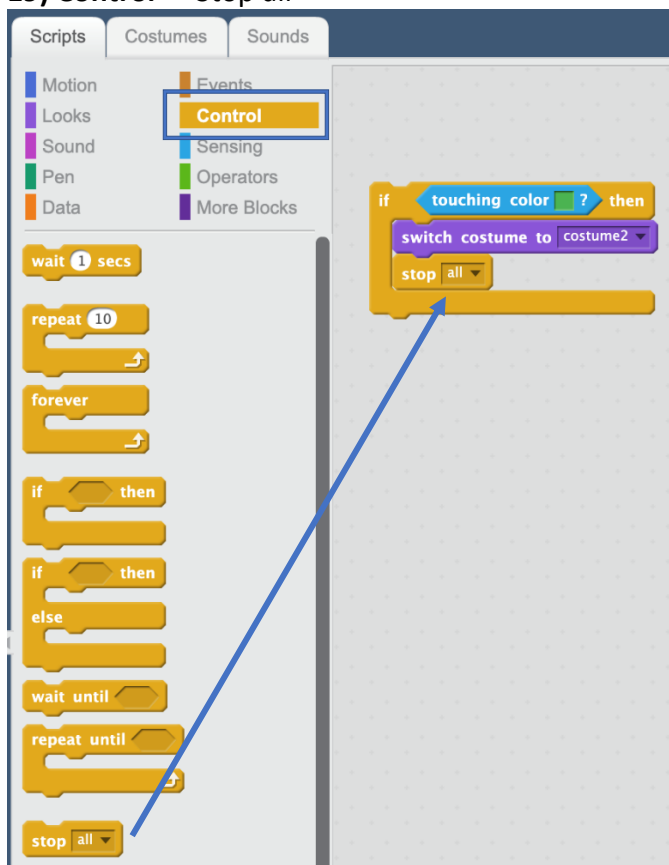**17) Control ->** If / then

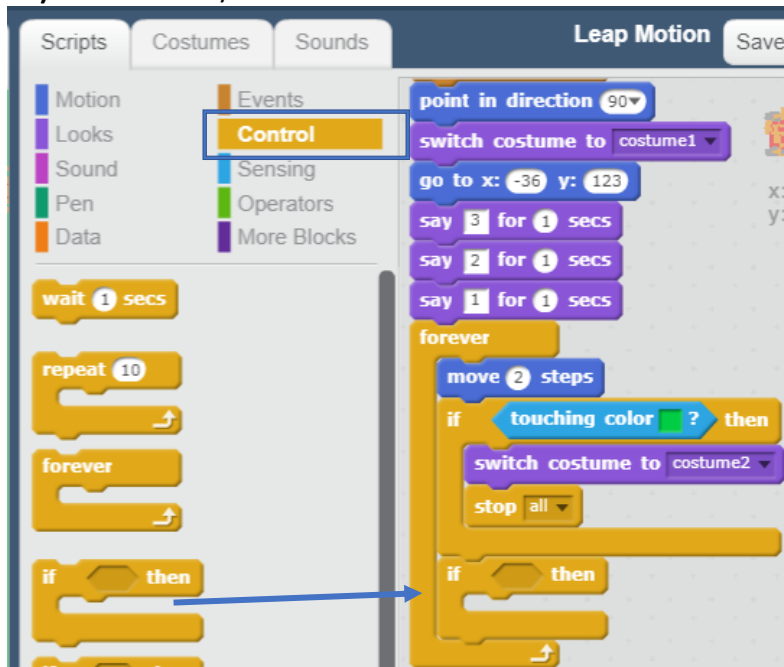**18) Looks ->** Switch costume to [costume2]

19) Control -> Stop all

20) Control -> If / then

21) Sensing -> Touching color (white) -> click the "color" box then click the white line
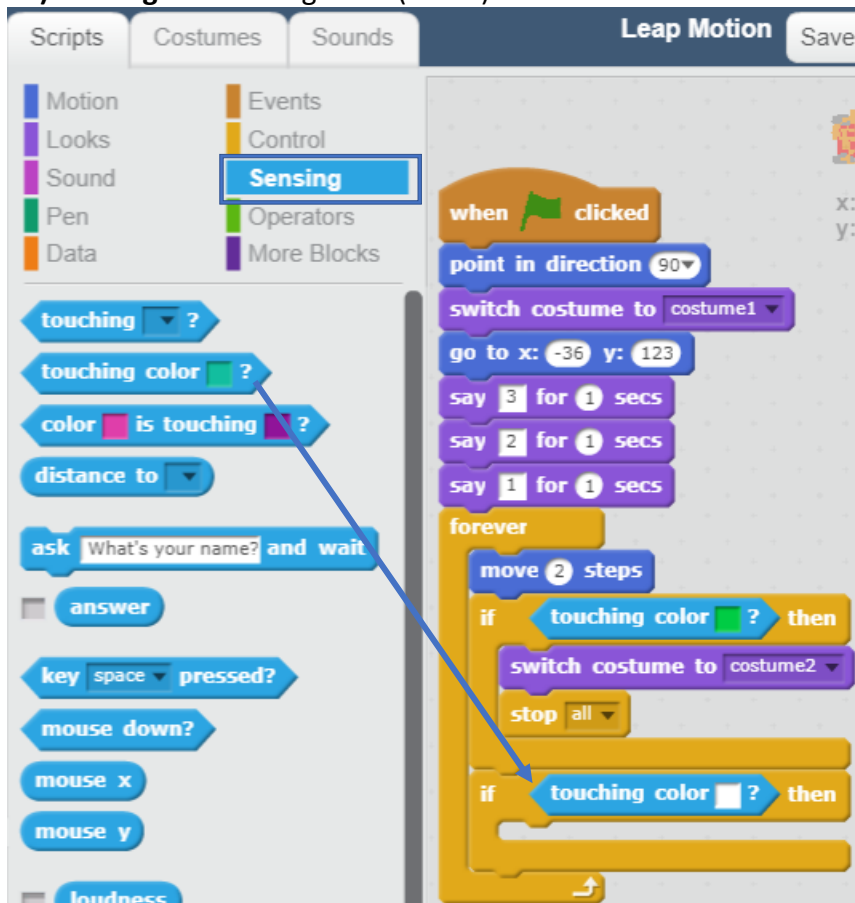
22) Looks -> Say "You won!" for 2 seconds
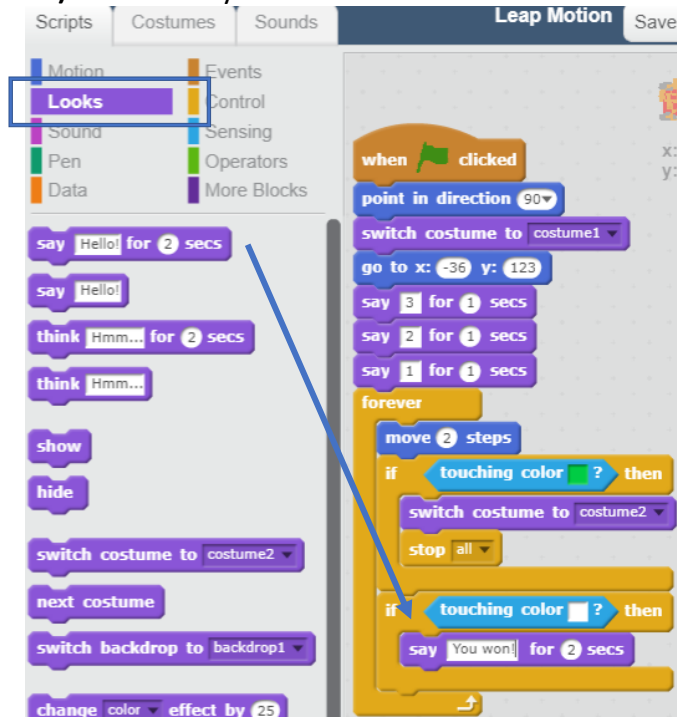
23) Control -> Stop all
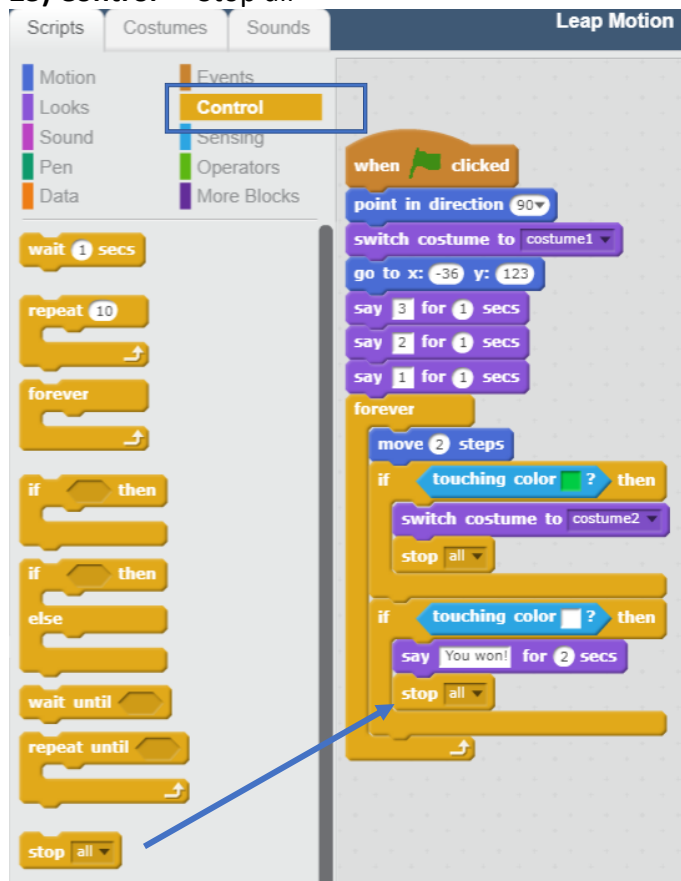
24) Control -> If / then
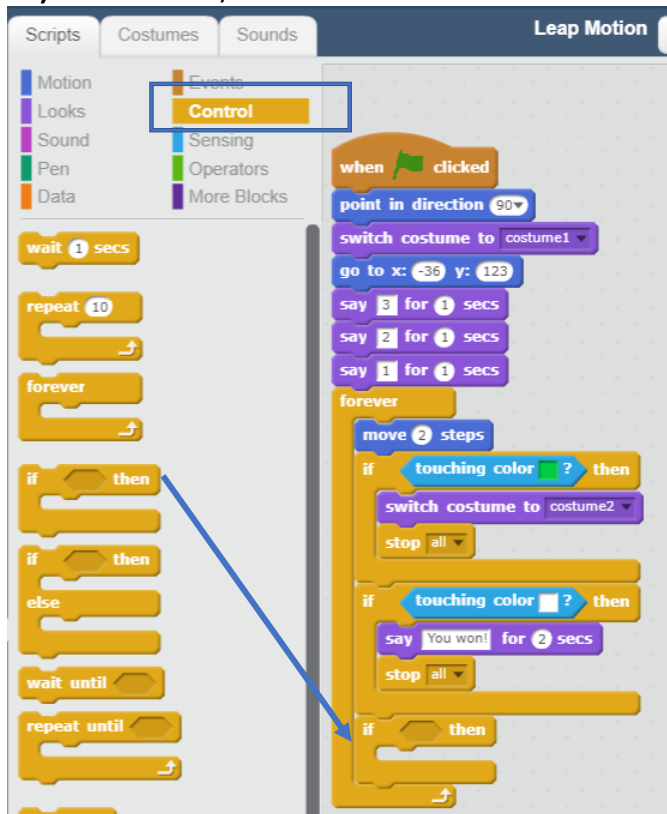
25) Sensing -> Touching color (pink) -> click the "color" box then click the boost "V"
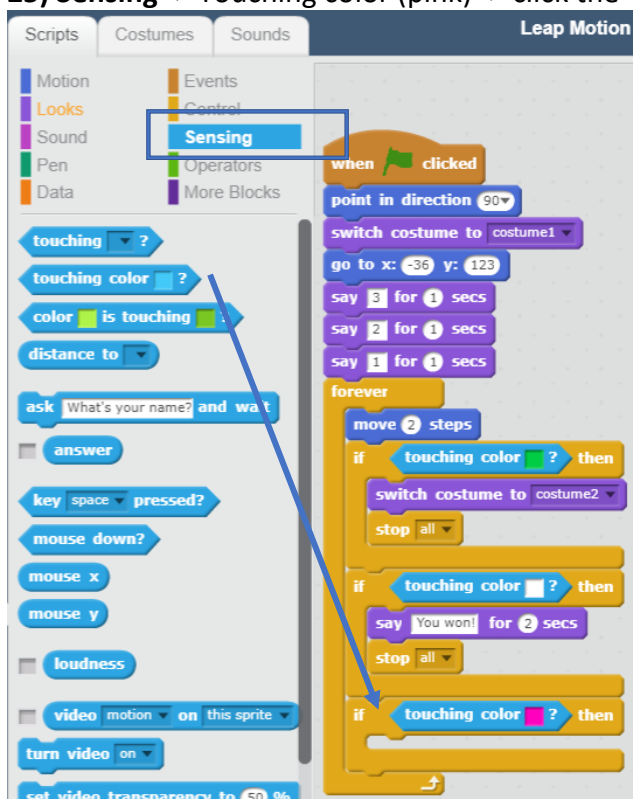
26) Motion -> Move 5 steps
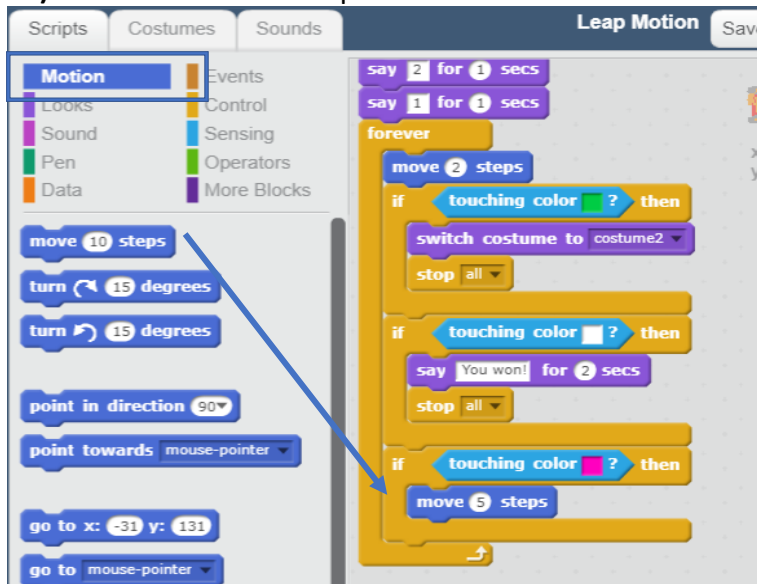
27) Events -> When (right arrow) key pressed

28) Motion -> Turn (right 15 degrees)

29) Events -> When (left arrow) key pressed

30) Motion -> Turn (left 15 degrees)

31) To play the game, click on the blue box to maximize the screen, then click the green flag to begin.

Summary

Steps 9-11: What happens when you start the game?
Set the car's X / Y start coordinates, the direction that car is facing, and the non-crashed car
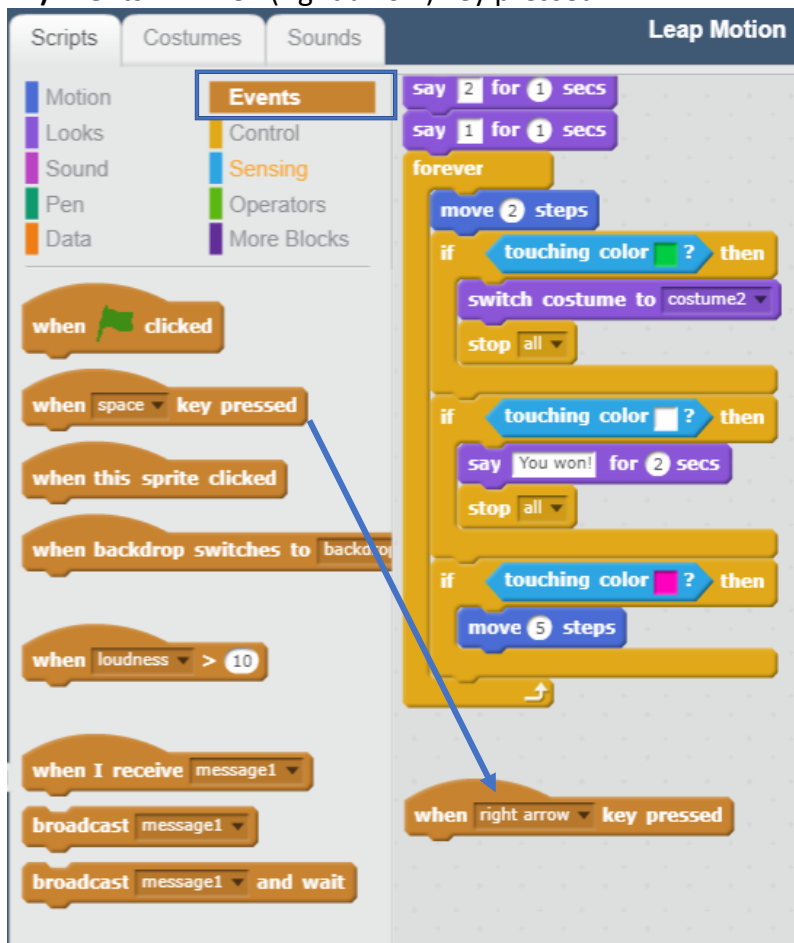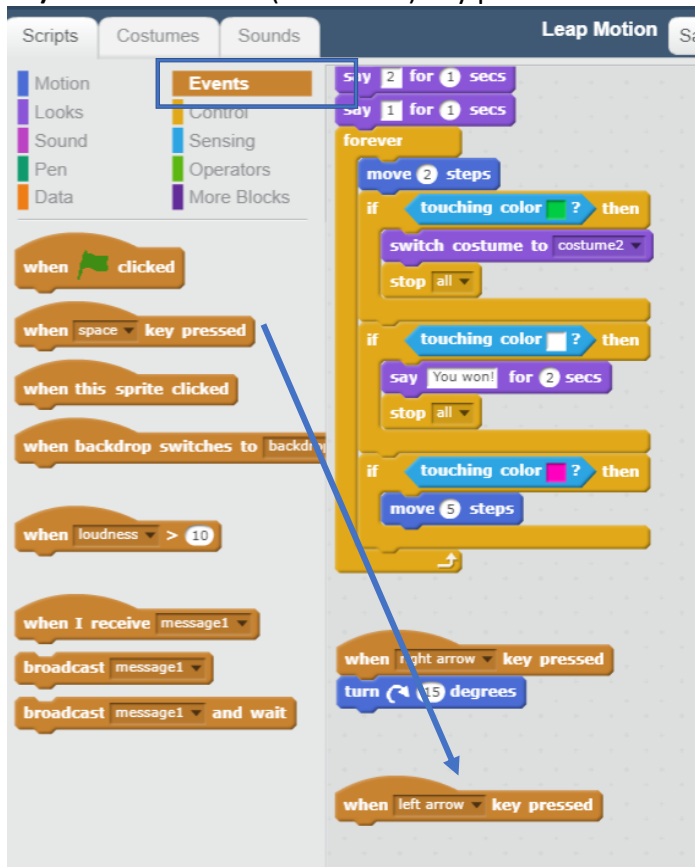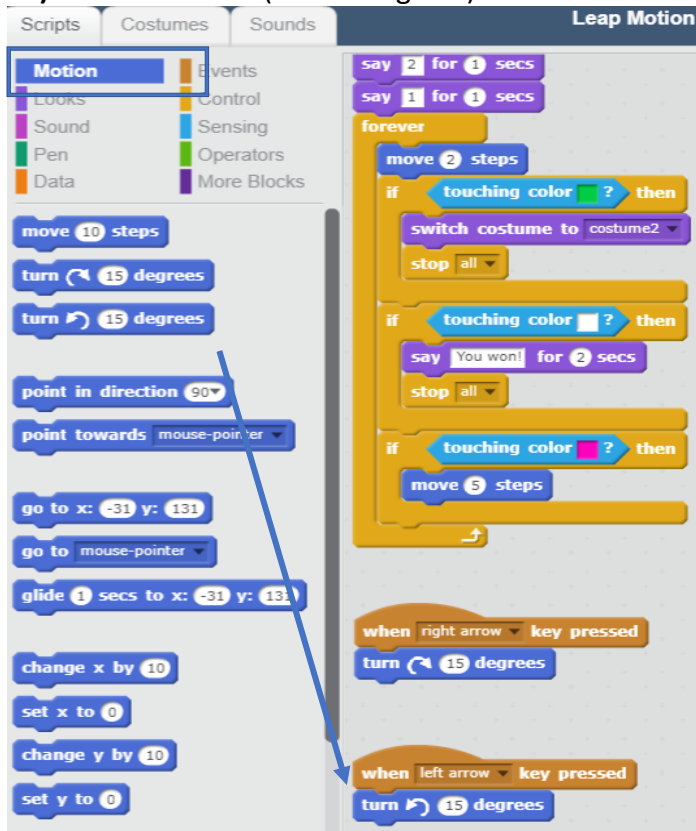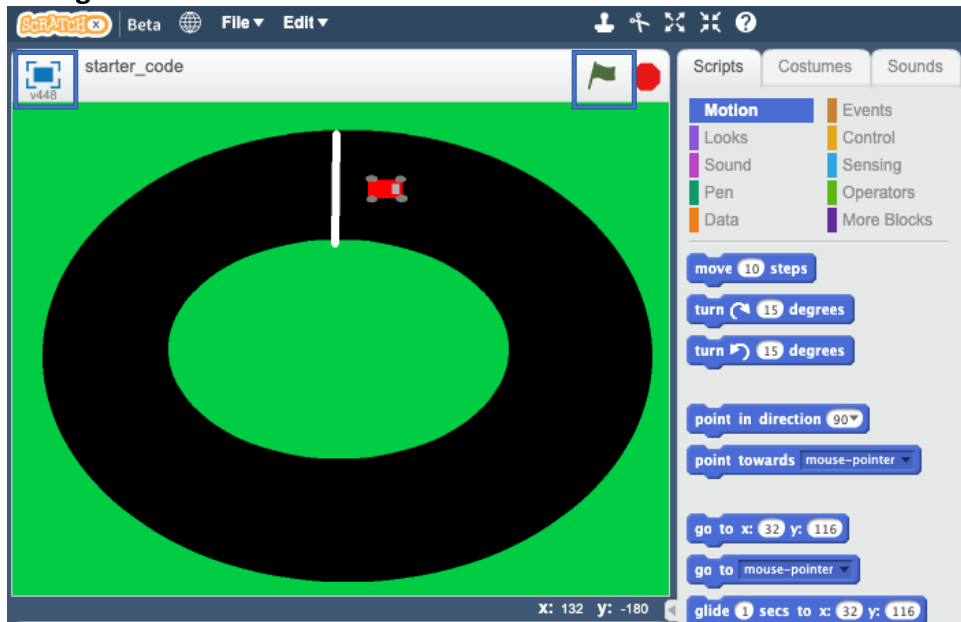
Steps 14-15: What about moving forward?
The "forever" block will continue moving the car forward indefinitely

Steps 16-19: What about crashing? How do they know they've crashed?
The "if" statement will stop the car from moving and change it to a crashed car when it touches the "green" color

Steps 20-23: What about winning? What signals that you've won the game?
If the car touches the white line, you've won. Display a winning message and stop the game.

Steps 24-26: What about "boost"? How do we make the car go faster?
If the car touches the pink "V" we want it to go faster. Instead of moving just 2 steps, we want to move 5 steps.

Steps 27-30: How do we steer the car?
The "listeners" watch for the left / right keyboard arrows and then turn the car 15 degrees. You can change the "15 degrees" value to make the car turn more / less. Try it!