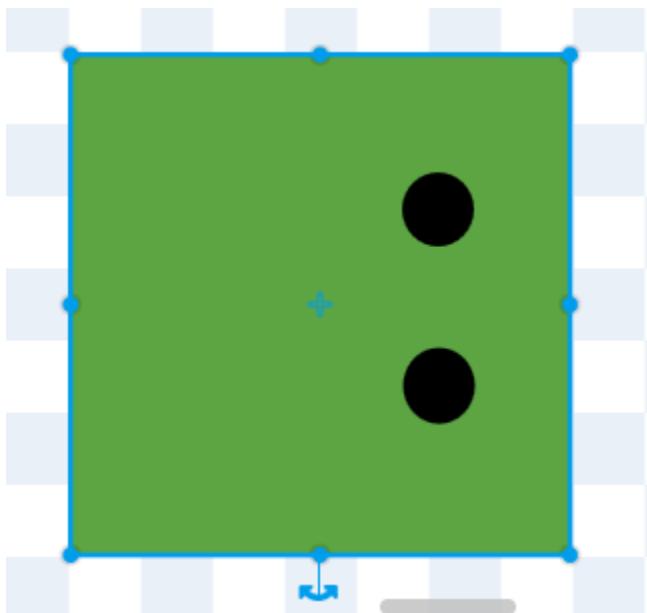
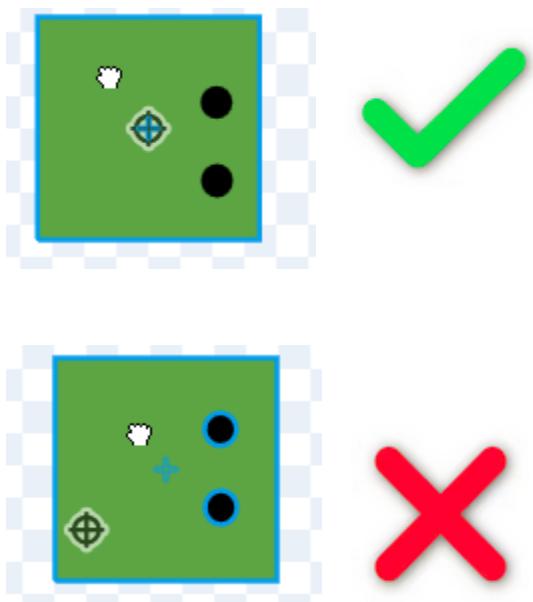
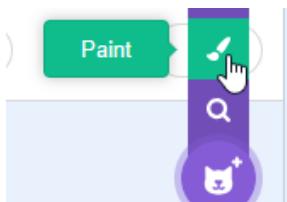


G-6 Game code for Snake Game

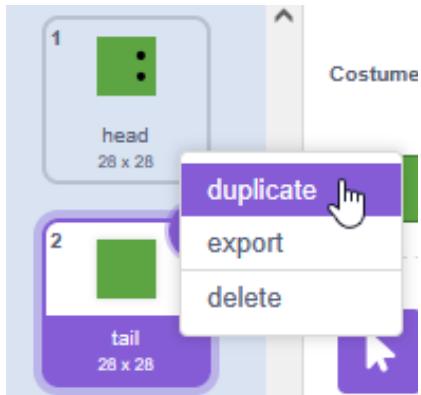
https://www.youtube.com/watch?v=xKPb_wMuuxo



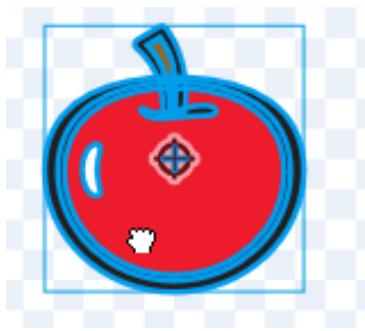
1. Make your snake head using paint option in sprite.



2. Make sure you overlap the blue cross of your sprite with the black cross of the background. This step is important to program it correctly.

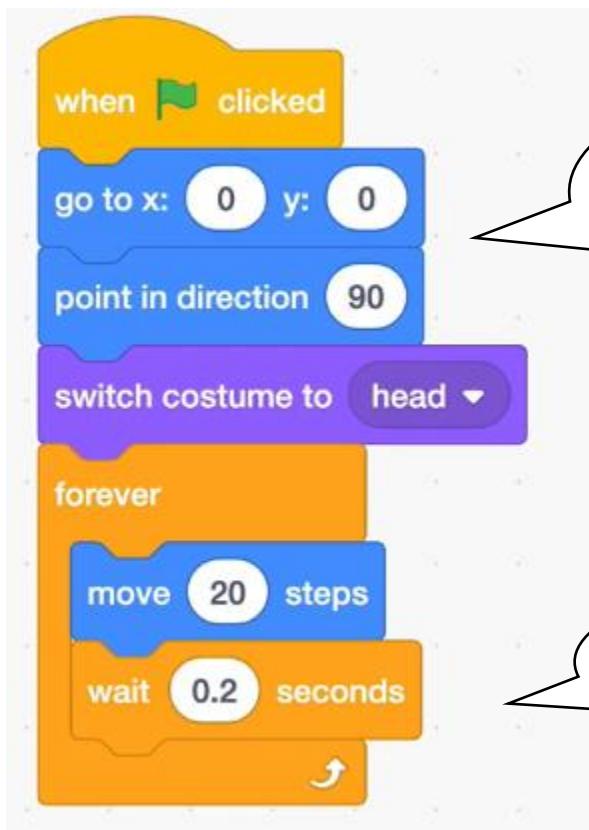


3. Duplicate the first costume to make the tail and rename both accordingly.



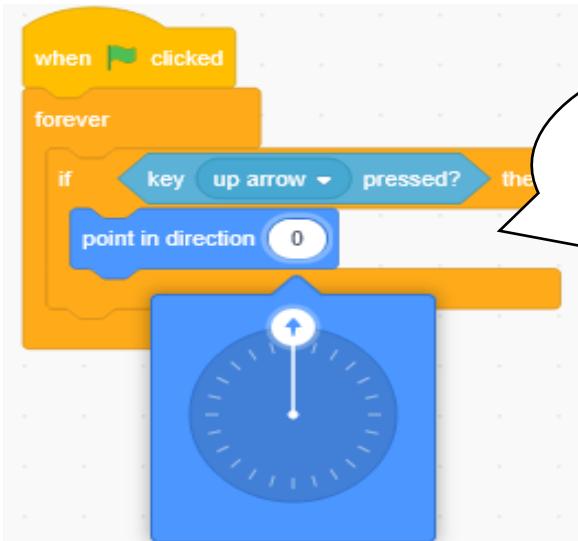
4. Select the second sprite, apple and click costume to position it to the black cross and reduce the size of it.

Code for Snake:



5. Position the head of the snake to the middle of the stage, pointing towards right.

6. Using wait block adjust the speed of the snake.

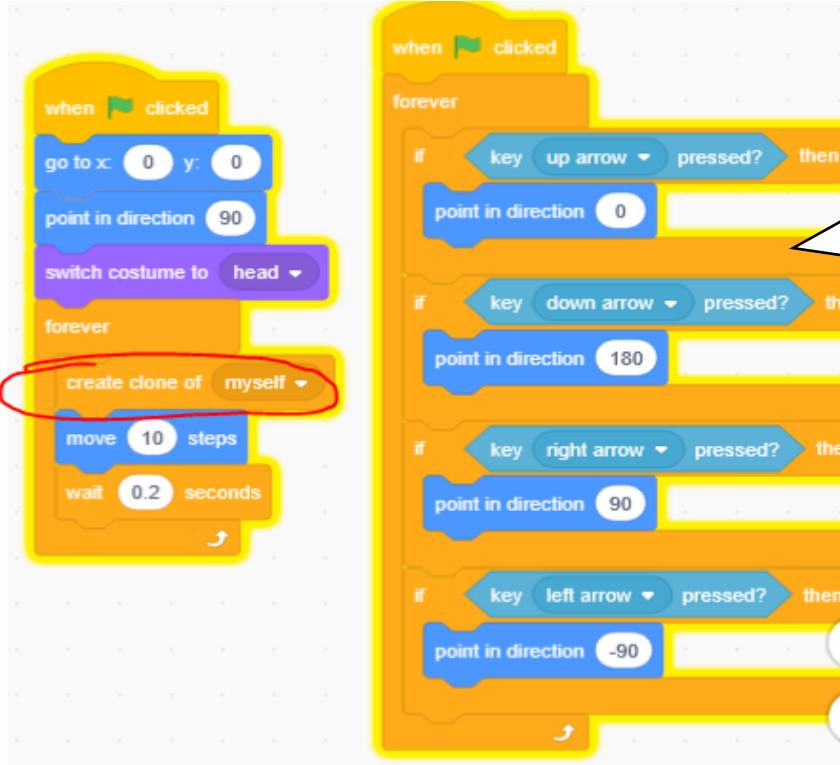


7.In forever loop use key-space-pressed and point-in-direction blocks inside if-block to point the snake's head upwards

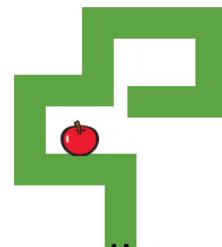


8.Duplicate the set of blocks and make the code for left (-90), right (90) and down (180) directions.

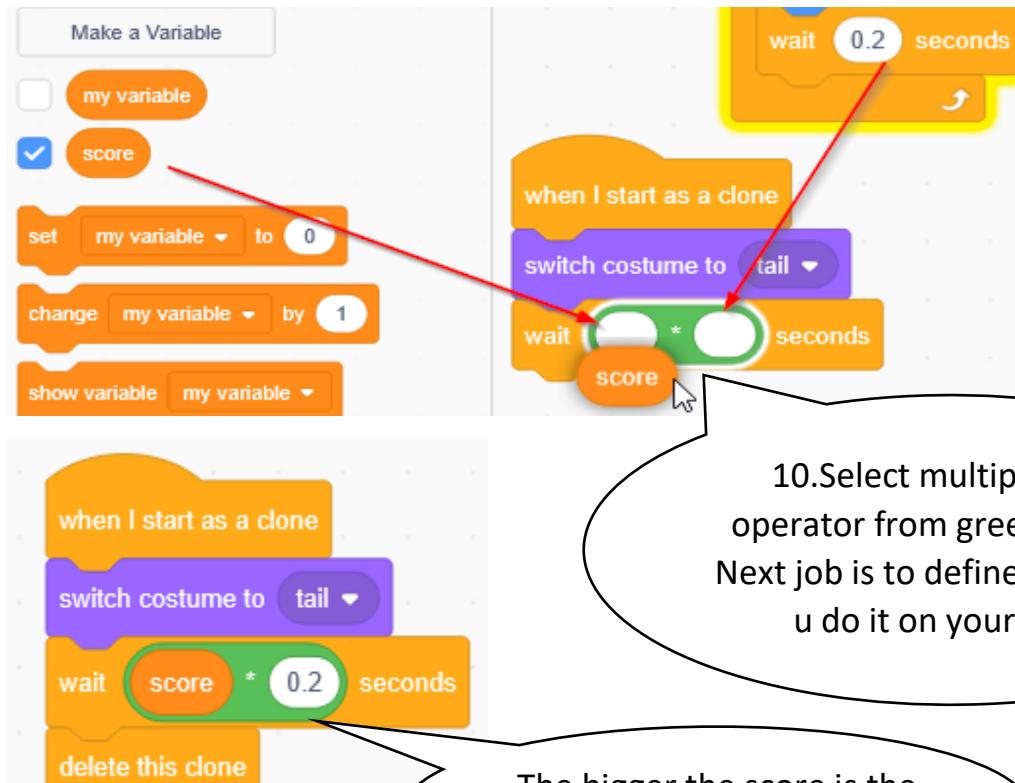
Once you are done with the coding of directions followed by snake. It's time to increase the length of the snake. This can be achieved by using **clone** block.



9.Adding clone(copy) of itself will create a never ending clones of snake.



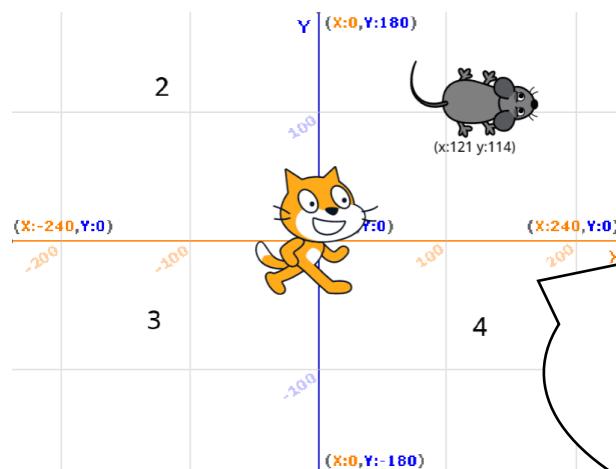
Lets code the clone so that it increases according to the score and the speed selected.



10. Select multiplication operator from green palette.
Next job is to define score. Can u do it on your own?

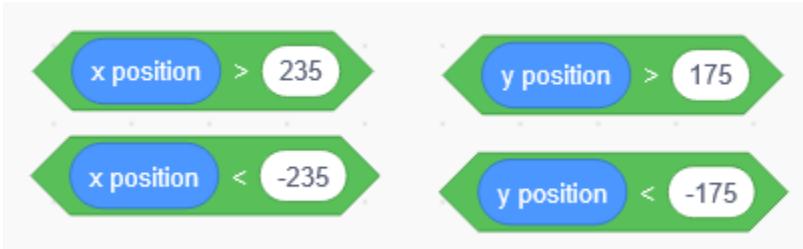
The bigger the score is the longer the snake will be.

We want to make the game over if the snake touches the boundaries or itself. Let's code for that but before that lets understand the values of (x,y) on each boundary

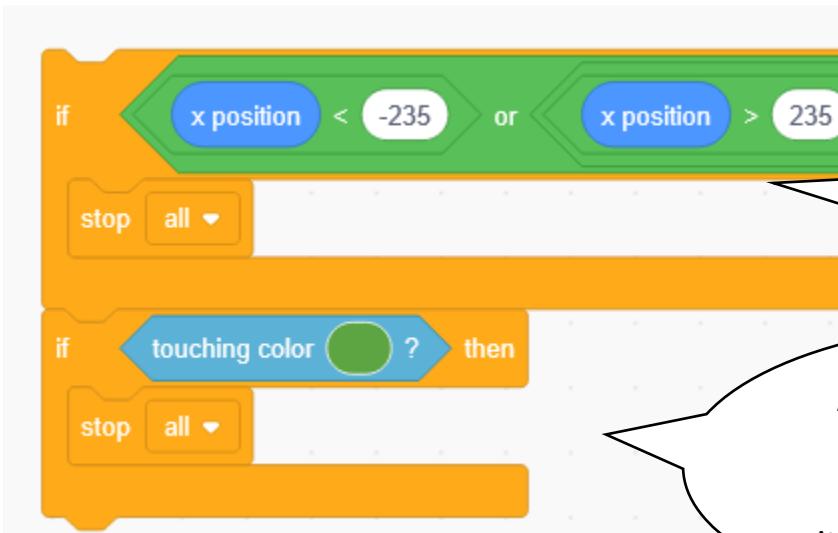


X-axis (Horizontal) Ranges:
from **-240** (left edge) to **+240** (right edge).
Y-axis (Vertical) Ranges:
from **-180** (bottom edge) to **+180** (top edge).

So if any condition defined below get true the program should stop.

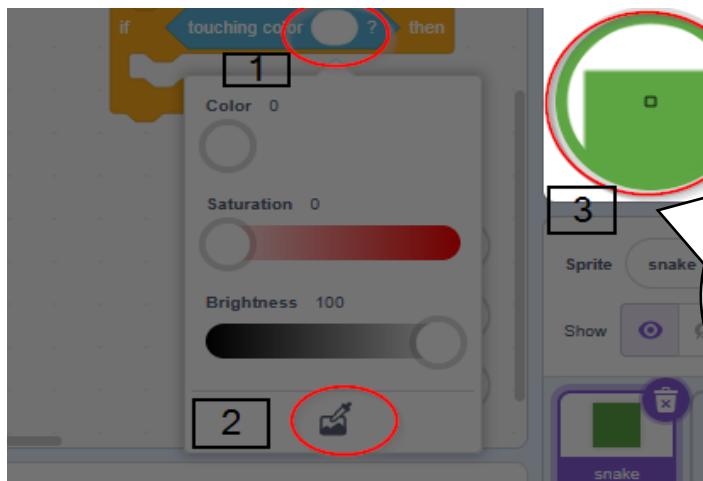


We can combine all these conditions using multiple nested or operators.



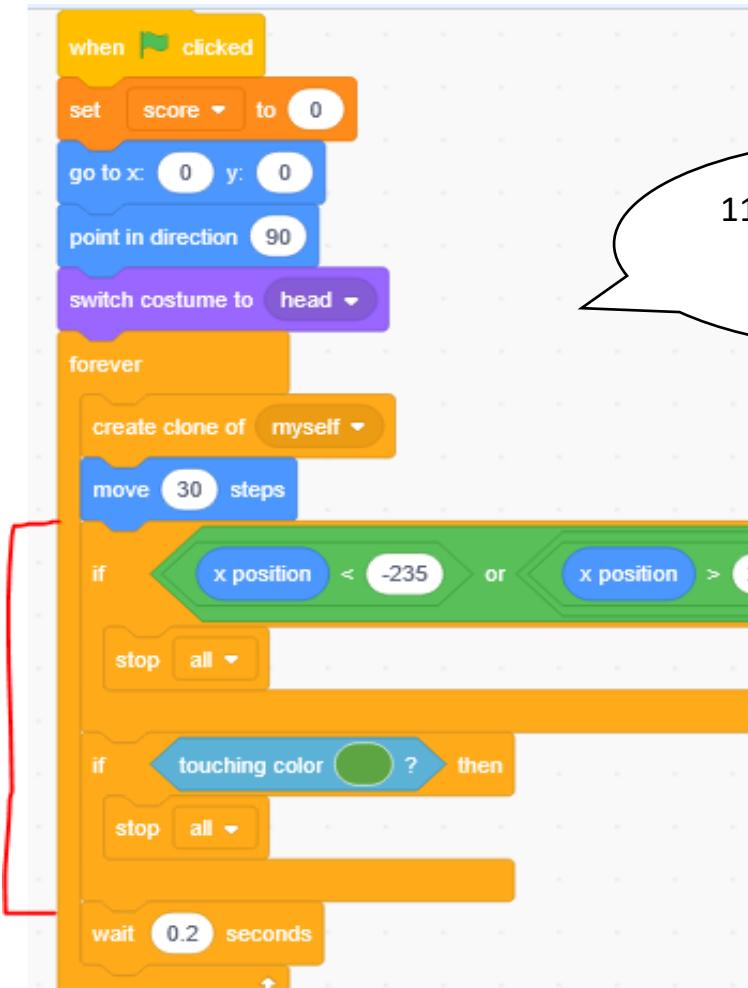
So if this condition is true then stop the game

And if the snake touches anything green on the screen, means touching itself, then the game stops.



In order to choose exactly the same shade of green that we selected in costume, first select that costume so that it appears on screen then follow these 3 steps.

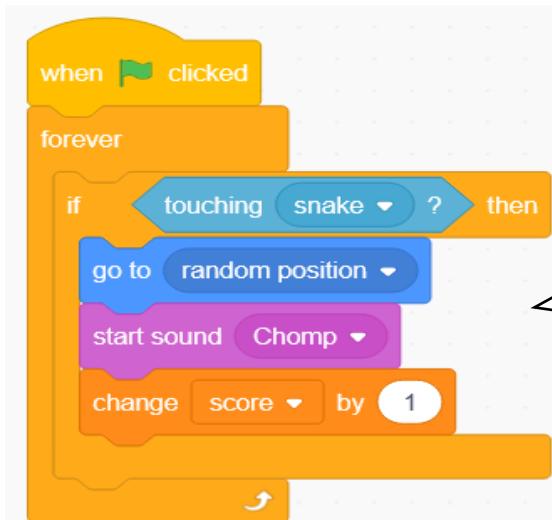
Let's embed this code in our main program



A Scratch script starting with "when green flag clicked". It initializes score to 0, sets the snake head to position (0,0) facing up, and switches costume to "head". A "forever" loop creates a clone of the snake, moves it 30 steps, and checks its position. If the snake is at the left edge (-235 < x < -20), it stops all clones. It also checks if it's touching an apple (green color). If so, it stops all clones, waits 0.2 seconds, and then loops back to move the snake.

11.Embed this if block in the main code.

Code for apple:



A Scratch script starting with "when green flag clicked". It runs a "forever" loop. Inside, it checks if the apple is touching the snake. If yes, it moves the apple to a random position, plays the "Chomp" sound, and increases the score by 1.

12.Make the apple go to random positions each time it gets touched by the snake.
Add sound and score.
You are done.