

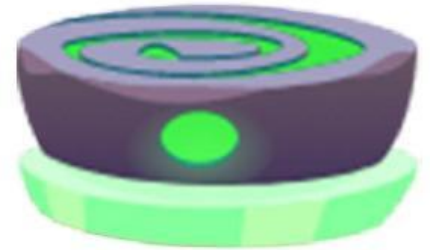
Project 135



Coding School



micro:bit

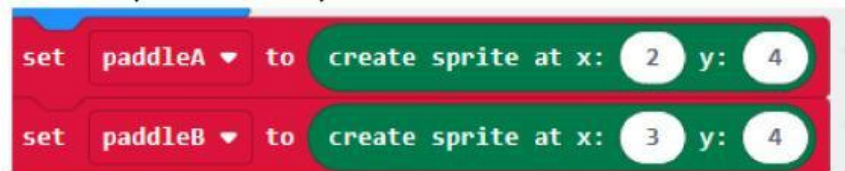


Start here

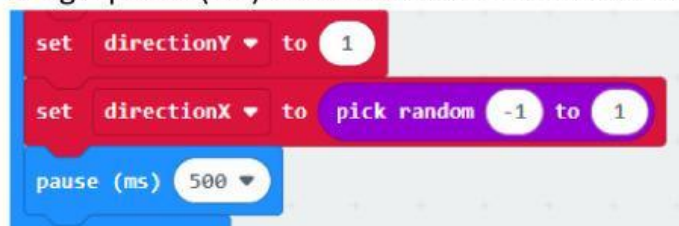
- ❖ Click Variables and set variables as paddleA, paddleB, ball, directionY and directionX.



- ❖ Drag on start block and drag set paddleA and set paddleB into it.
- ❖ Drag a create sprite at block paddleA and paddleB in the game.
- ❖ Position paddleA and paddleB as follows.



- ❖ Drag a set ball block and drag a create sprite at block into it and set a random value from 0 to 4 for X value and 0 for Y.
- ❖ Set directionY and set directionX drag two blocks and set the values as below.
- ❖ Drag a pause (ms) block into it and leave it for 500ms.



- ❖ On button A pressed block එකක් drag කර ඒ තුළට if block එකක් drag කරන්න.

- ❖ Drag a block with the > sign into it.
- ❖ Assign paddleA x to its left and 0 to its right.
- ❖ Drag two paddleA change and paddleB change blocks and set their values as below.

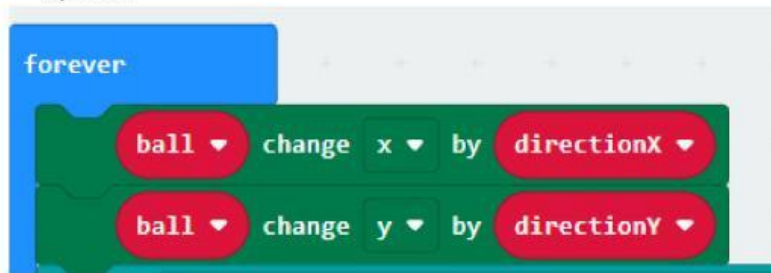


- ❖ On button B pressed drag a block and drag an if block into it and set the values as below.
- ❖ Drag two paddleA change and paddleB change blocks into it.
- ❖ Set its values as below.



- ❖ The following events must be repeated continuously, so the forever block was used for that.

- ❖ Use the following code to change the X and Y movements of the ball sprite.



- ❖ Use an if else block to make the bouncing happen when the ball sprite hits paddleA or paddleB and what happens when the edge hits.
- ❖ Ball change X by drag the block and the ball should change from its current position, so give the following values for it.
- ❖ Drag Ball change Y by block and give -1 to it.



- ❖ At the same time, give a random value between -1 and 1 for set direction Y and -1 for set direction.
- ❖ And to increase the score by 1, drag a change score by block and give 1 as the value..

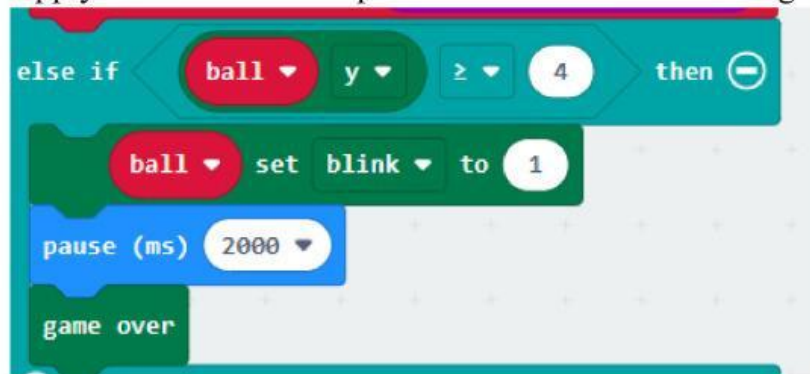


- ❖ In the else section, let's create what happens when the ball sprite collides with the edges.
- ❖ Drag an if else if block for the upper and lower edges.

- ❖ In the If section, give ball Y $\leq$ 0 as Condition and set directionY as 1 and set directionX as a random value between -1 and 1.



- ❖ When the lower edge hits it, the game is over and in the else if section, give ball Y $\geq$ 4 as the Condition and apply a ball set blink value of 1.
- ❖ Apply block as below to pause for 2 seconds and show game over.



- ❖ Drag an if else if block to create what happens when the left edge hits it and the right edge hits it.
- ❖ In the If section, give ball X $\leq$ 0 as Condition and give value 1 for set directionX.

- ❖ For the else if section, give ball X ≥ 4 as Condition and set direction value -1



- ❖ Place the block inside the else part of the main if else block outside the if else if block to pause in 500ms.



- ❖ The complete forever code is as follows.

