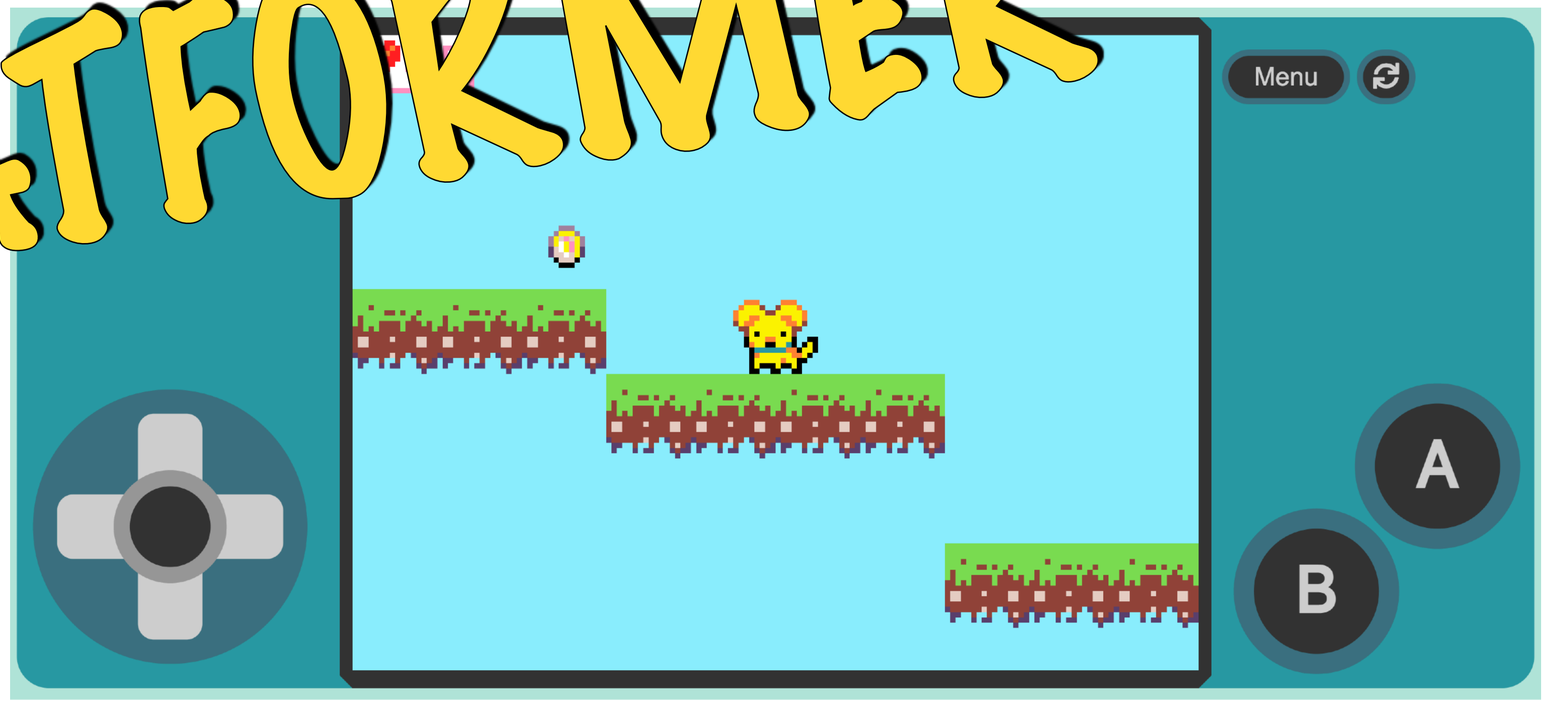
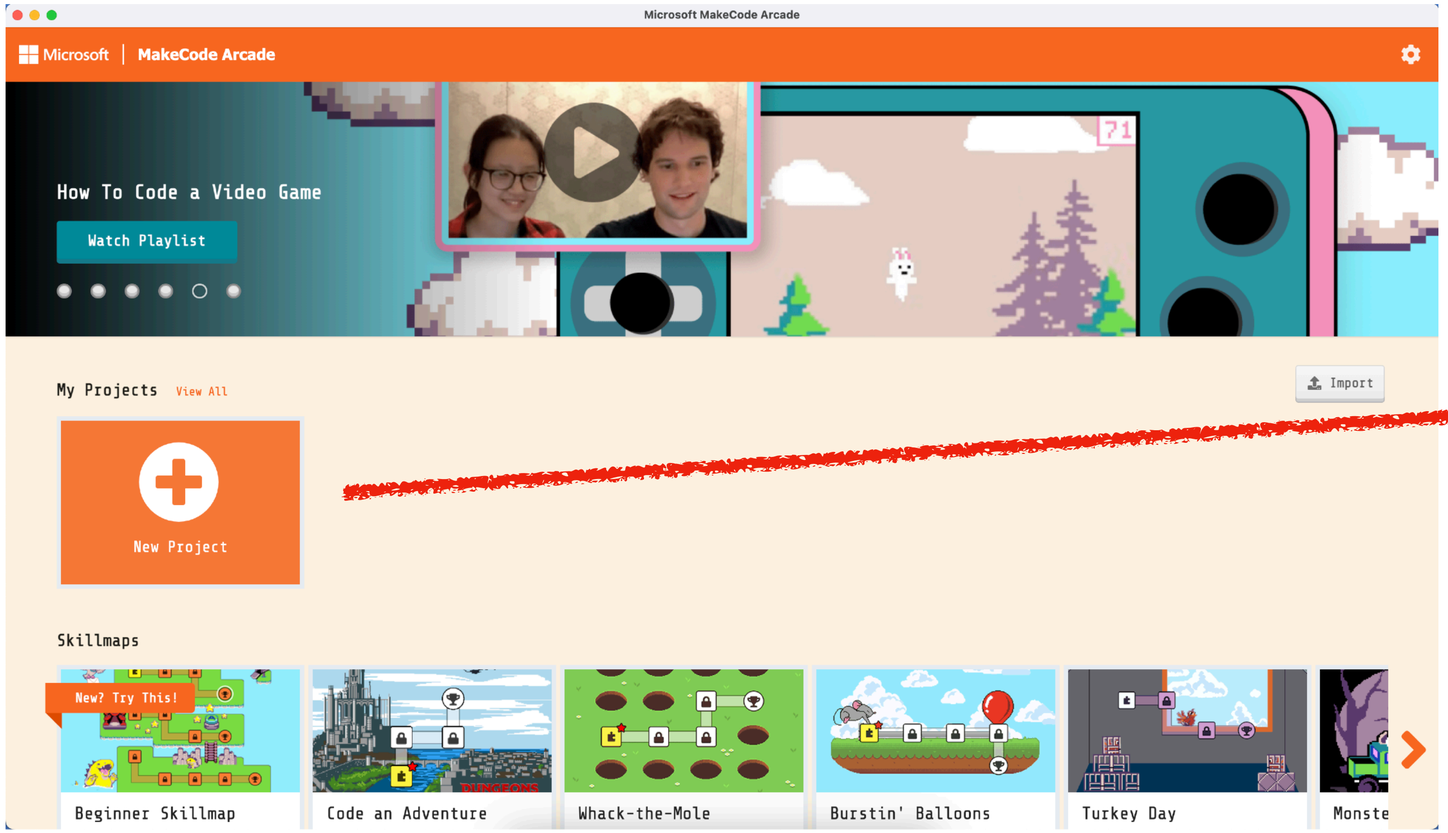
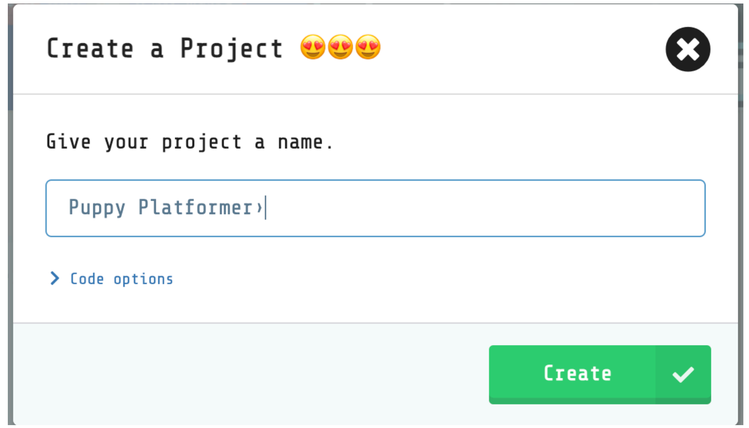
PUPPY PLATFORMER



STEMLABS

Step 1: Create your Game



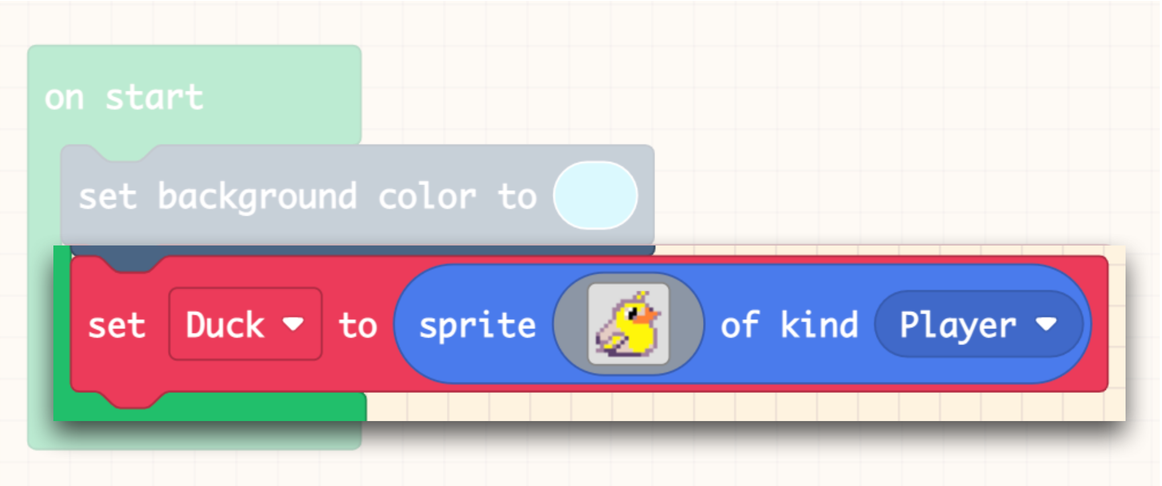


Click ‘New Project’ and give your project a name

Step 1: Create your Scene

1 Scene

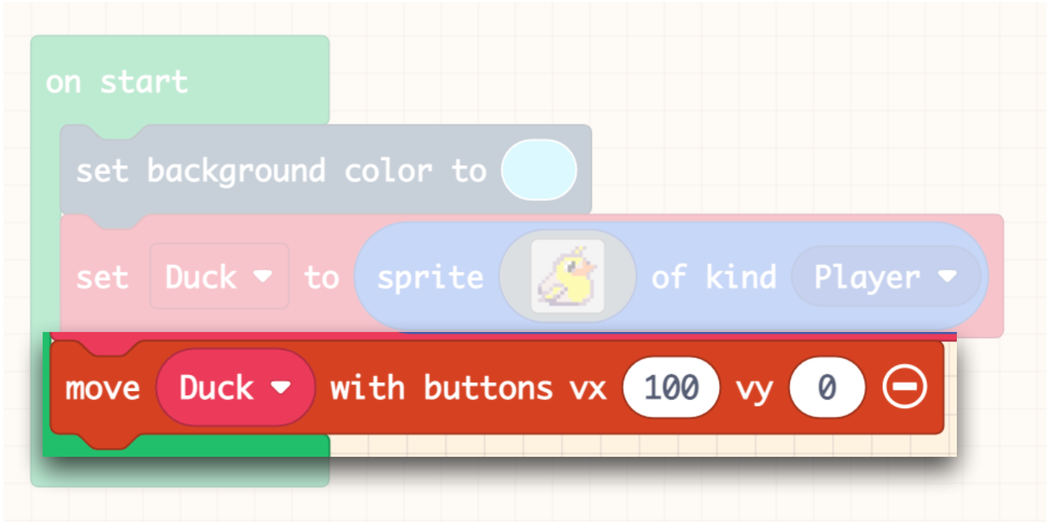
- Go to the Scene menu and select the code block above
- Create a blue background



2 Sprites

- Go to the Sprites menu and drag in the code block above
- Choose your favourite character or draw one!

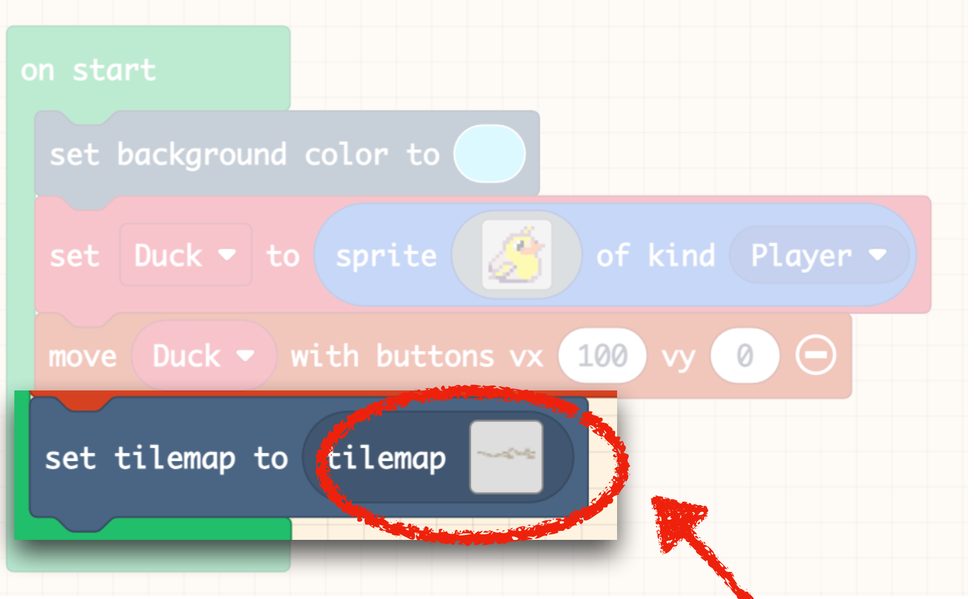
Step 1: Create your Scene



3

Controller

Drag in the code block above
to make your character move



4

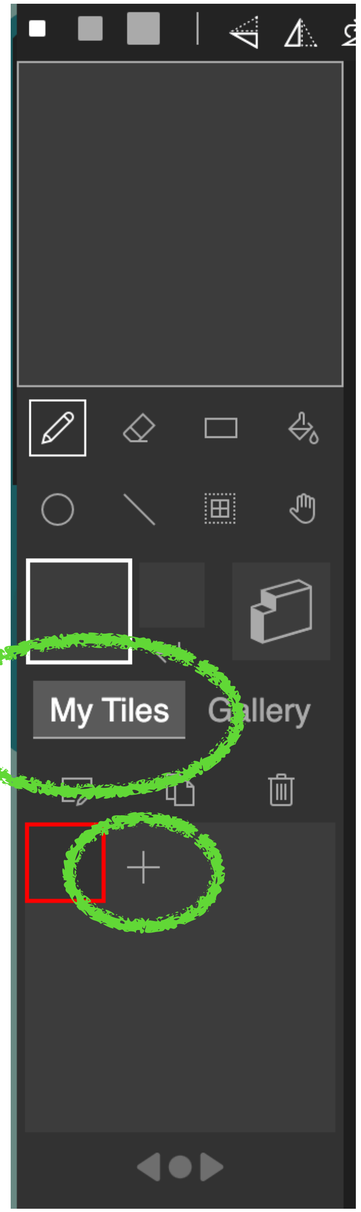
Scene

- Drag in the ‘set tile map’ code block
- Click on the grey tile

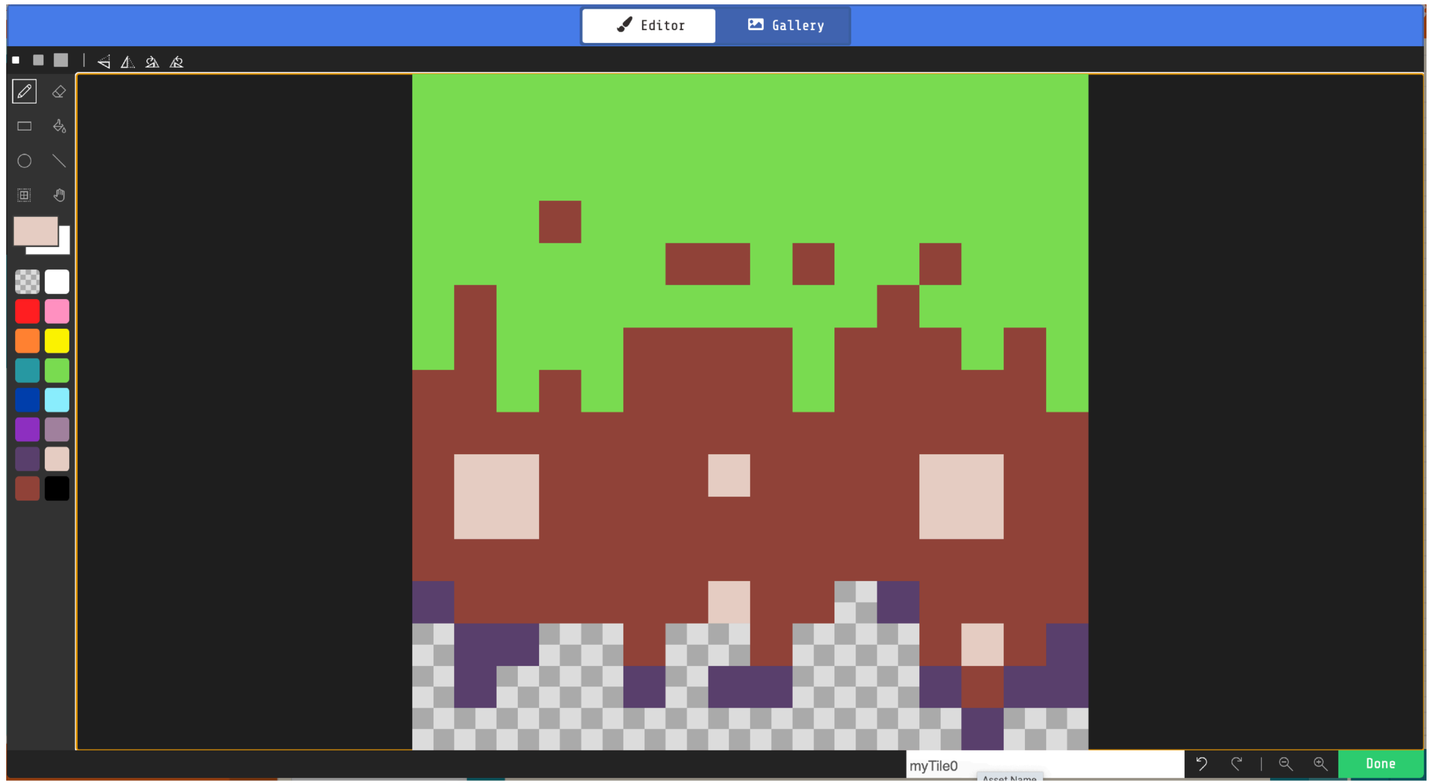
Step 1: Create your Scene

5 Click on ‘My Tiles’

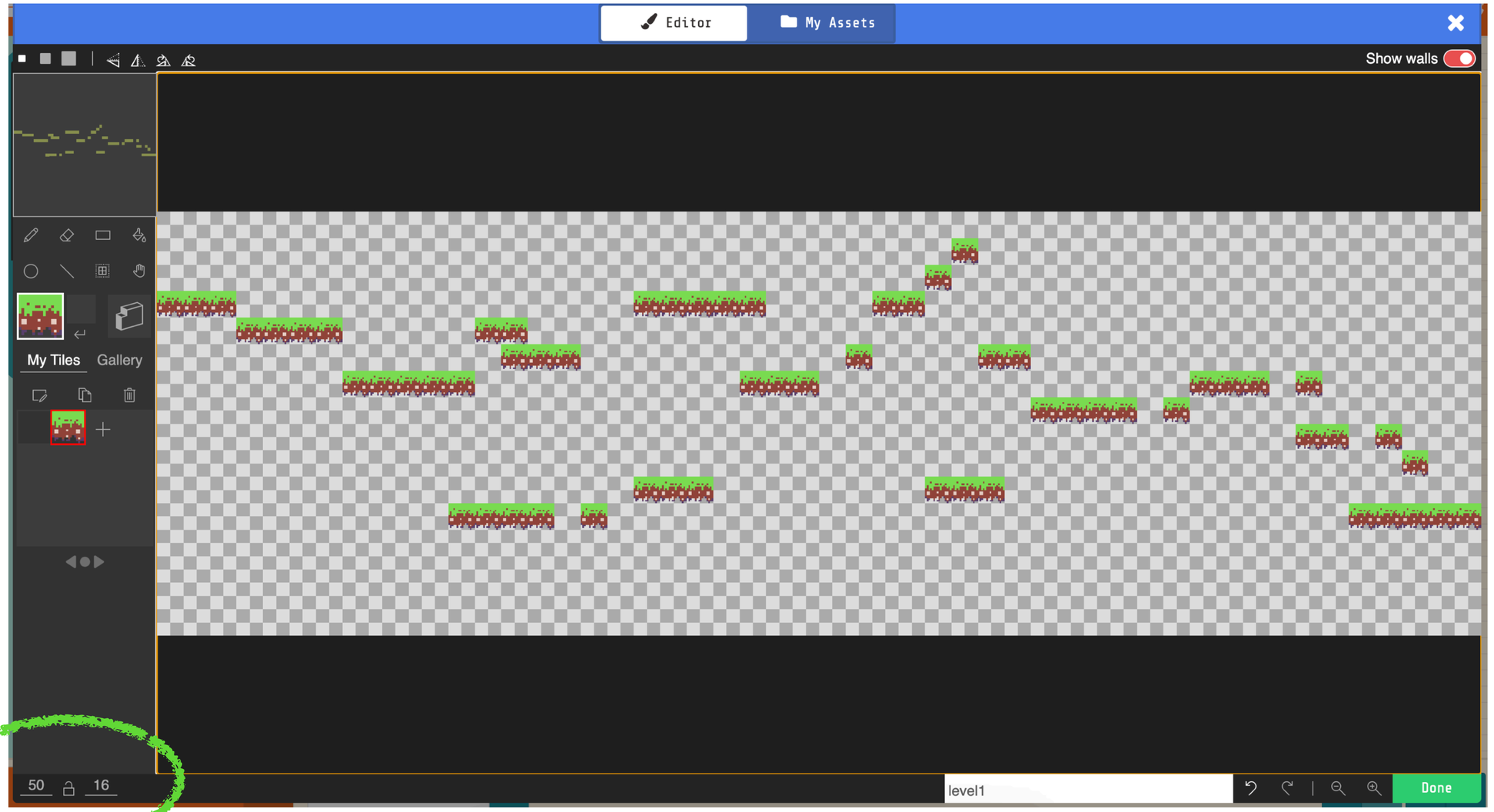
6 Click on the + icon



7 Create something like this to look like grass, dirt and stones then click ‘done’



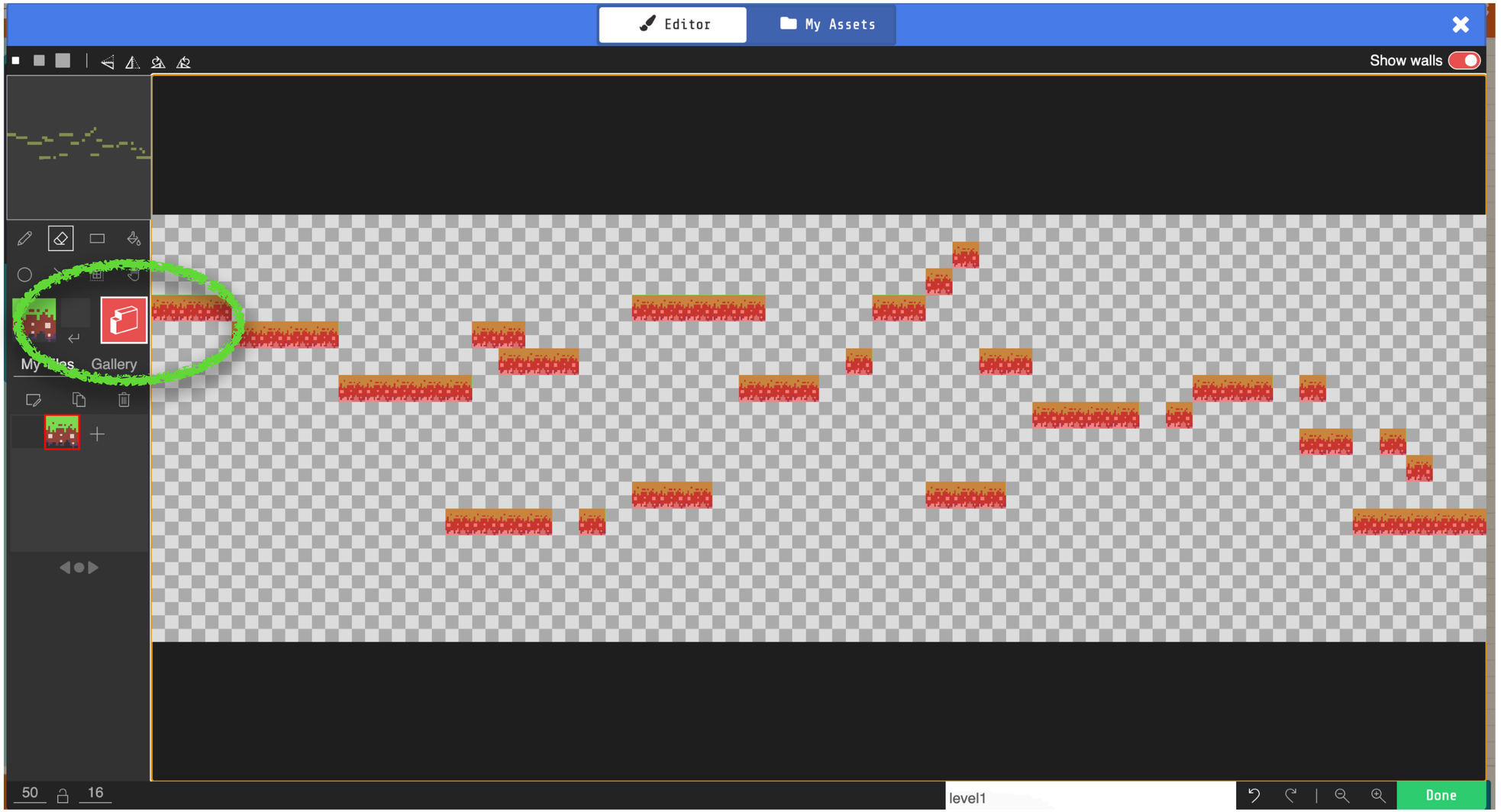
Step 1: Create your Scene



8

- Change the width of your platform to **50** x **16**
- Start drawing a few platforms

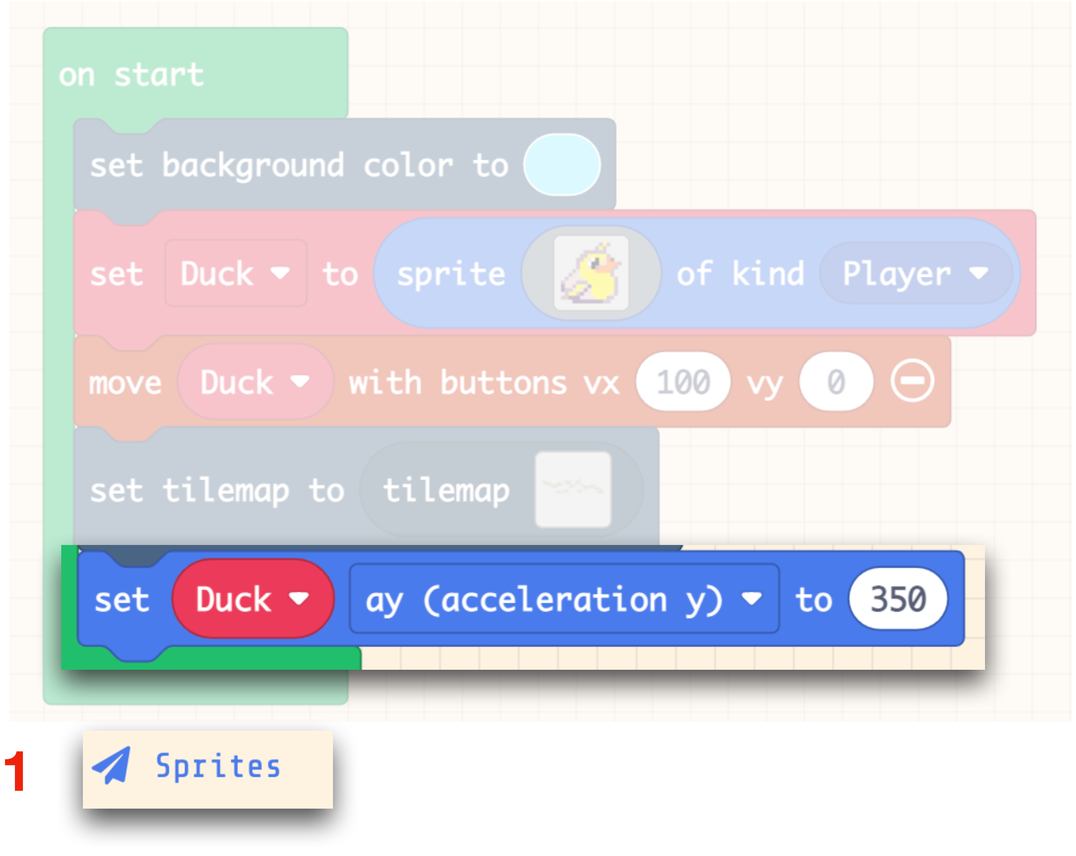
Step 1: Create your Scene - Make the walls solid!



9

- Click the Walls button and redraw over your platforms - this will make the walls solid so your Player doesn't fall through them!

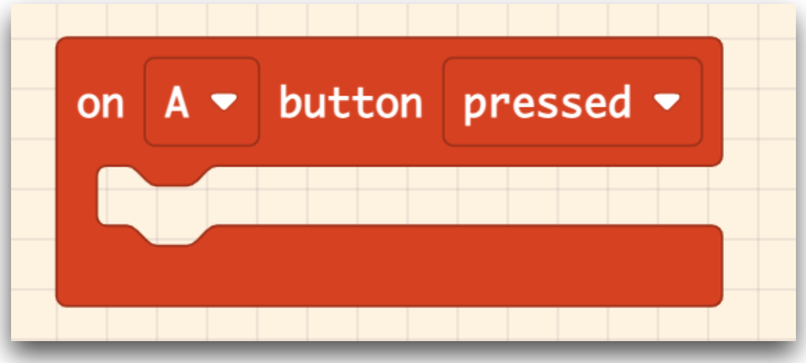
Step 2: Create Gravity and Jumps for your Player



- Go to the Sprites menu and drag in this code block
- Set the acceleration to 350

This will make the Player fall, like gravity!

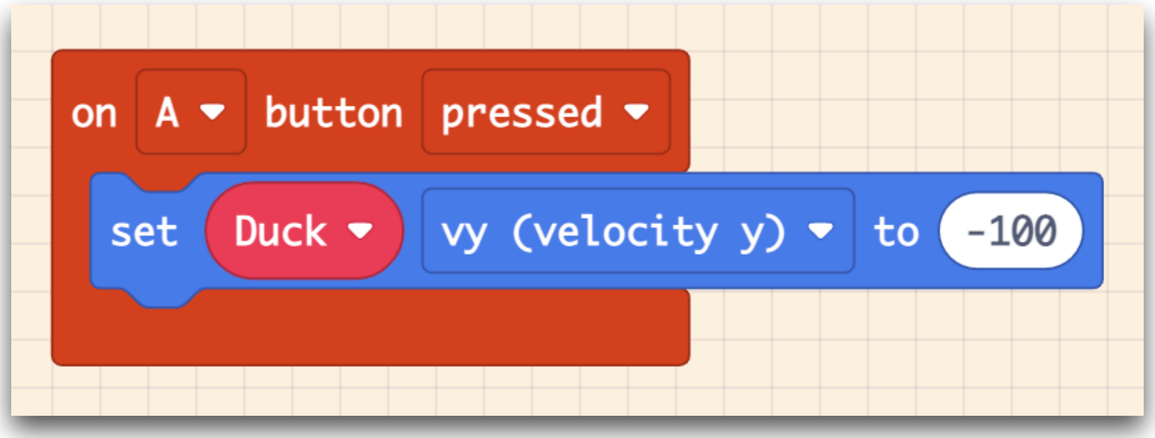
Step 2: Create Gravity and Jumps for your Player



2

Controller

Go to the Controller menu and drag in this code block



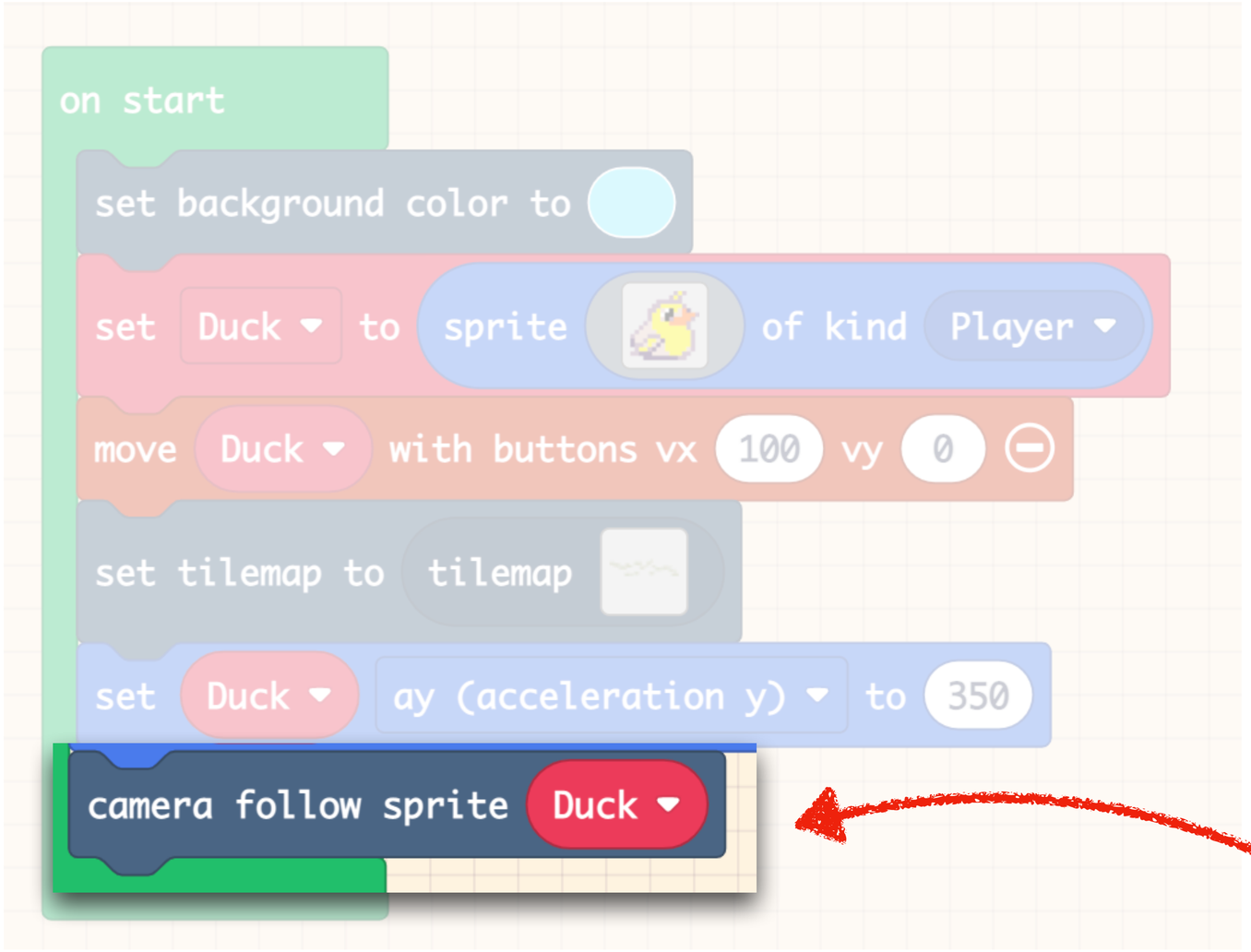
3

Sprites

- Go to the Sprites menu and drag in this code block
- Set the vy velocity to -100

This will make the Player jump when you hit the space bar

Step 3: Make the Camera follow the sprite along your platform



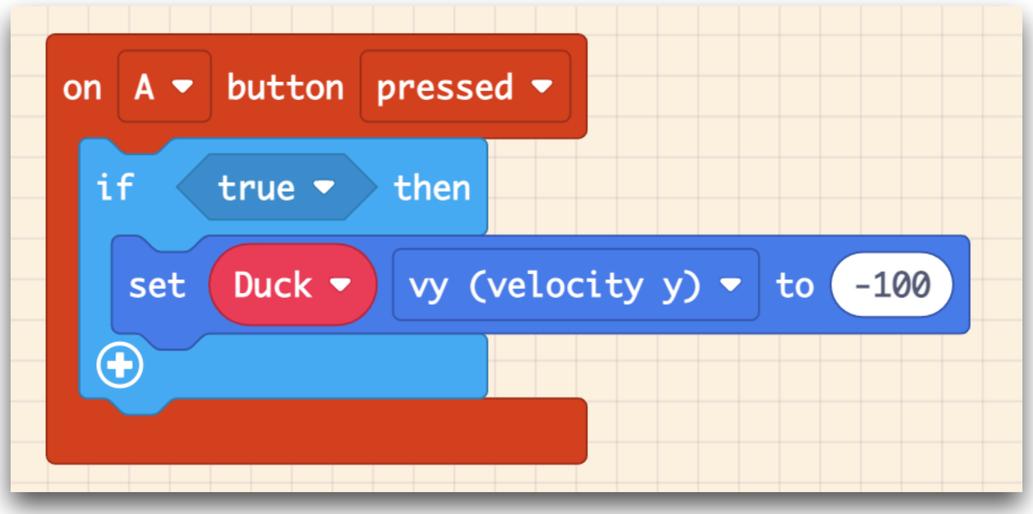
1

- Go to the Scene menu and drag in this code block

Step 4: Make it more complex - Stop your Player from being able to jump jump jump!

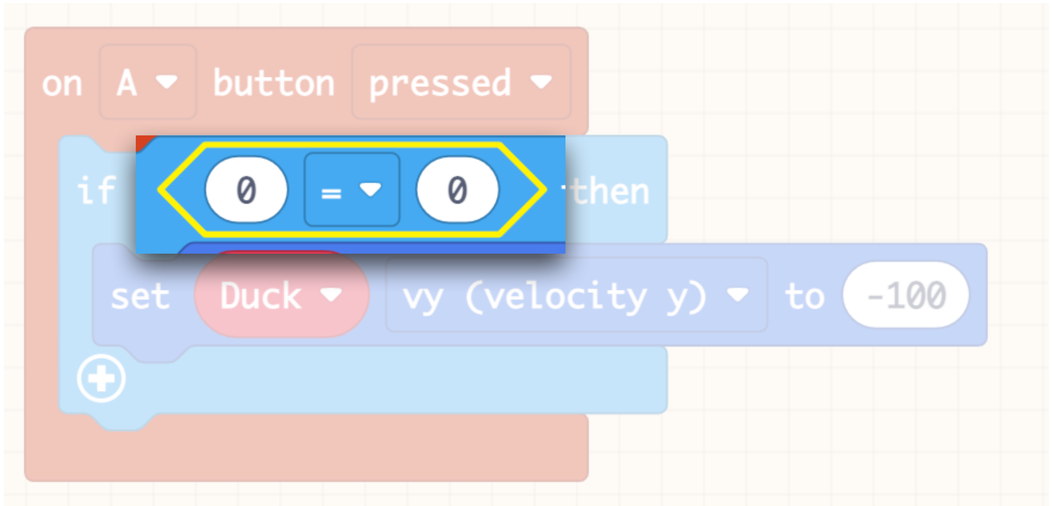
1

- Go to the Logic menu and drag in an IF TRUE THEN block
- Wrap it around the vy velocity block



2

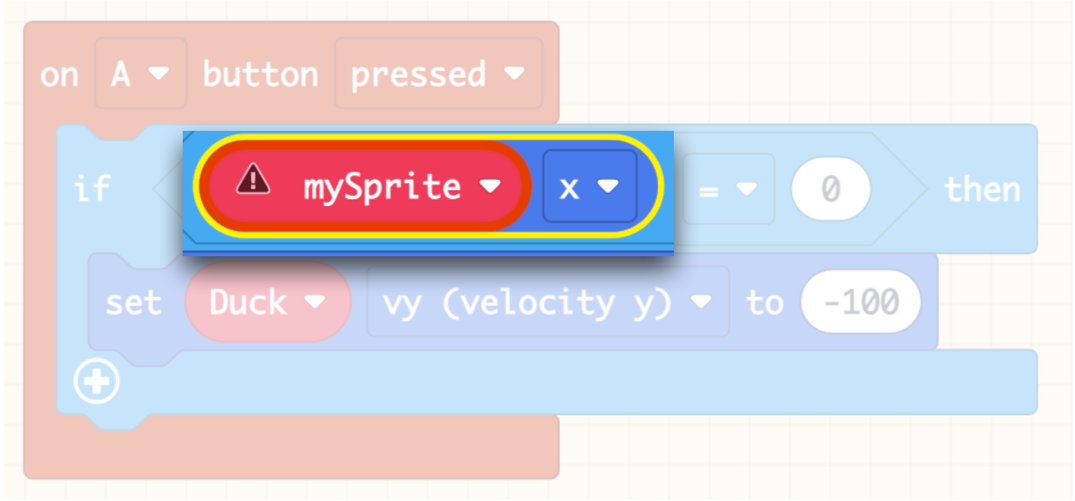
- Go to the Logic menu and drag the block below
- Drop it into the section that said ‘true’



Step 4: Make it more complex - Stop your Player from being able to jump jump jump!

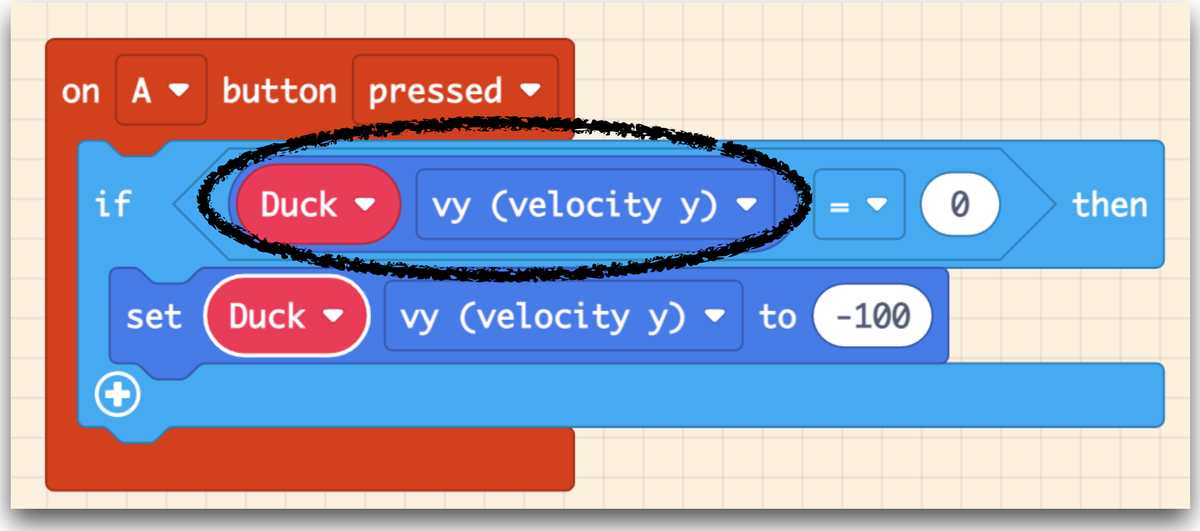
3

- Go to the Sprites menu and drag in this block
- Drop it into the first **0**



4

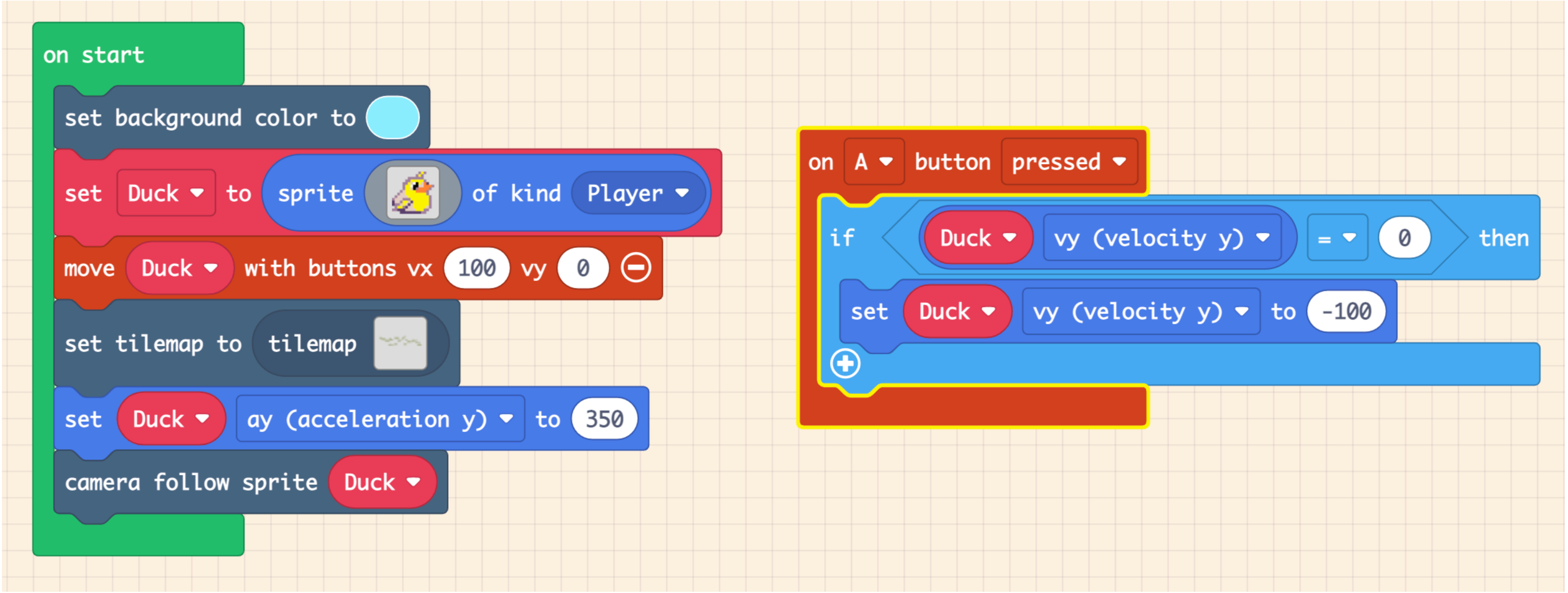
- Change the red block to what your player is called
- Change the **x** to **vy (velocity y)**



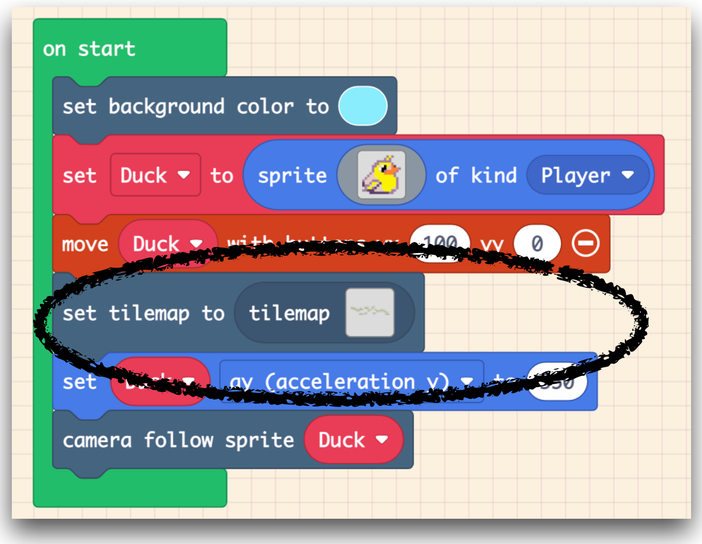
TEST YOUR GAME!

- Your player should not be able to double jump or jump when they are falling
- You should be able to move around your platform from start to finish
- You might need to go back into your **tile map** and edit the platforms
- You might need to edit your **jump velocity** (page 9)

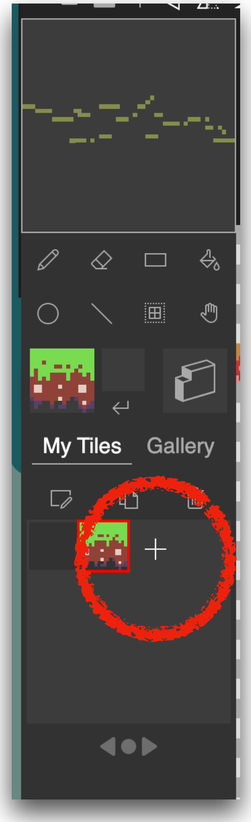
Your code should look like this



Step 5: End the Game if you fall!

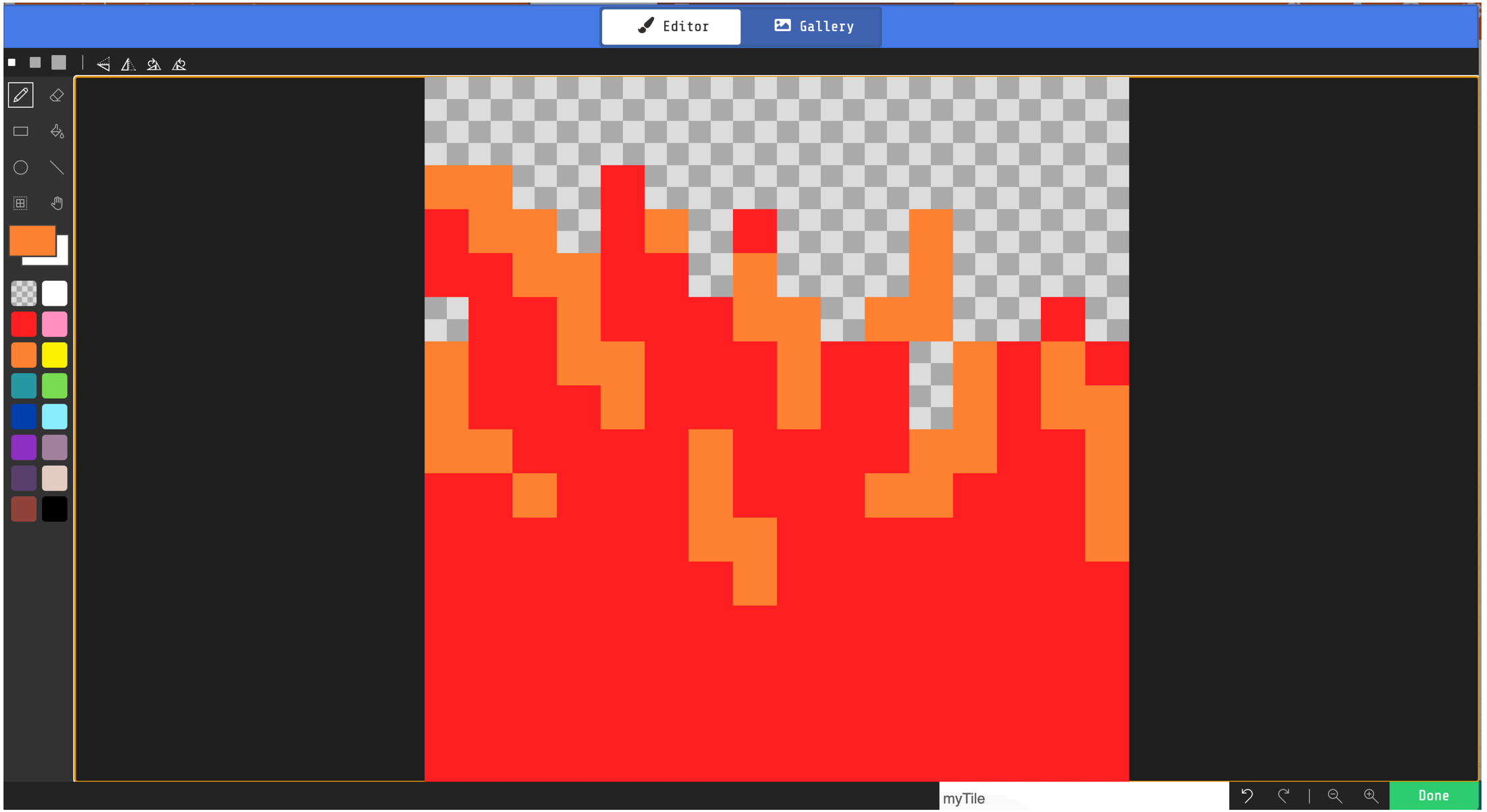


1 Click on the grey Tile Map box

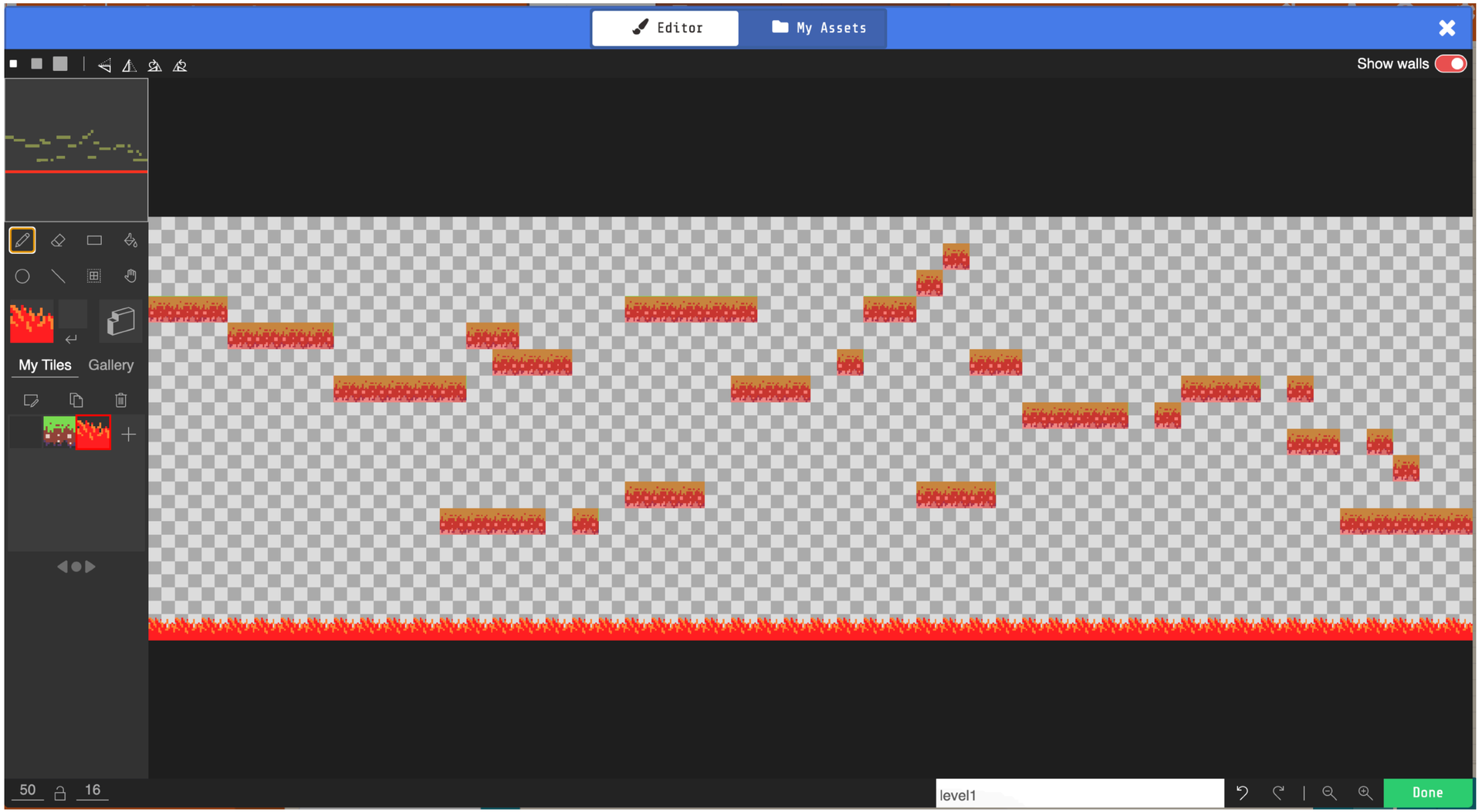


2 Click the + icon then make some red and orange Lava!!

Step 5: End the Game if you fall!

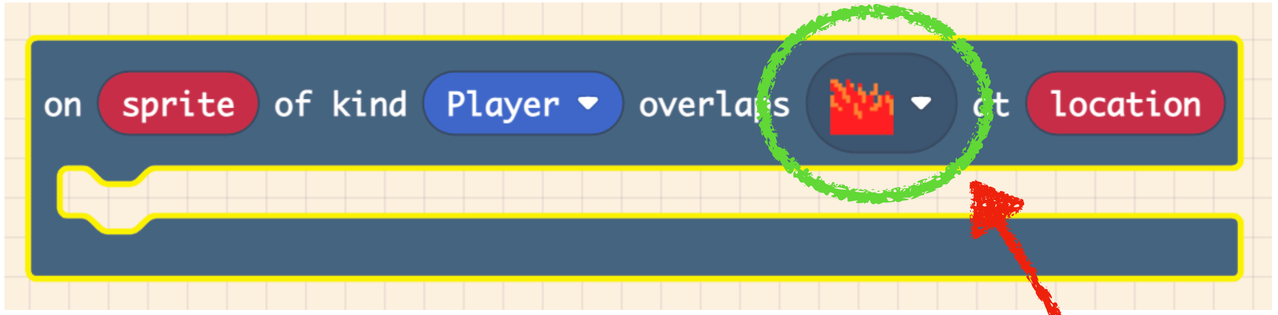


Step 5: End the Game if you fall!



Run the lava along the bottom of the screen

Step 5: End the Game if you fall!

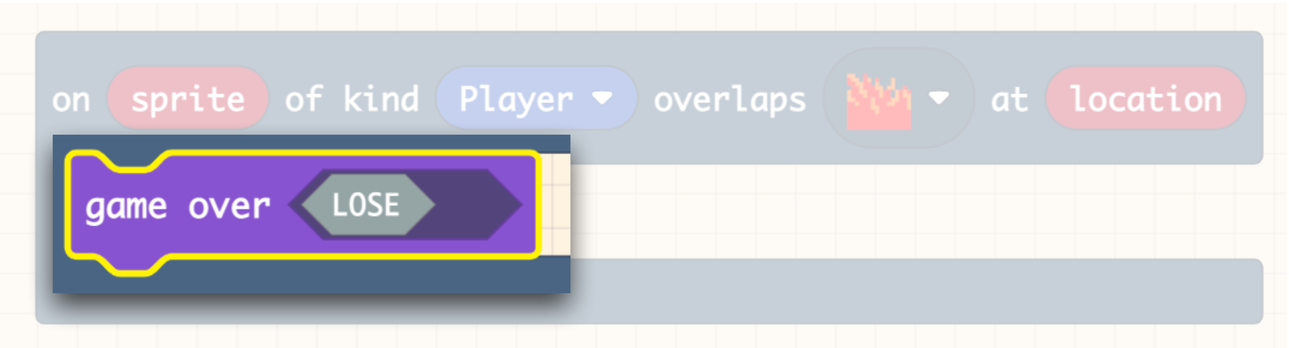


5 Scene

- Go to the Scene menu and drag in this code block
- Select your lava tile

6 Game

Go to the Game menu and drag in this block - set to **lose**



Step 5: End the Game if you fall!

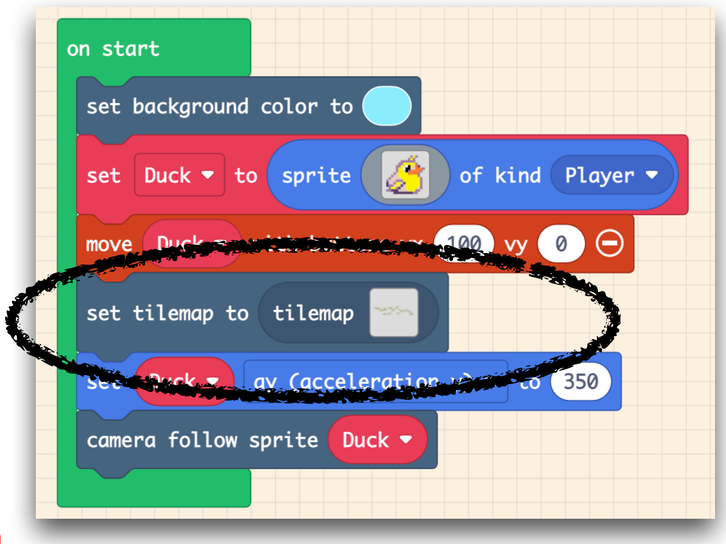
7 

Go to the Game menu and drag in this block - set to **melt effect if lose**

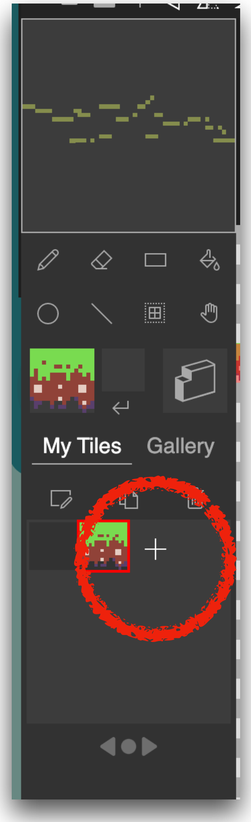
TEST YOUR GAME!

- If your Player falls and touches the lava the game should end
- You should see a pop up saying ‘Game Over’

Step 6: Win the Game if you reach the Portal!

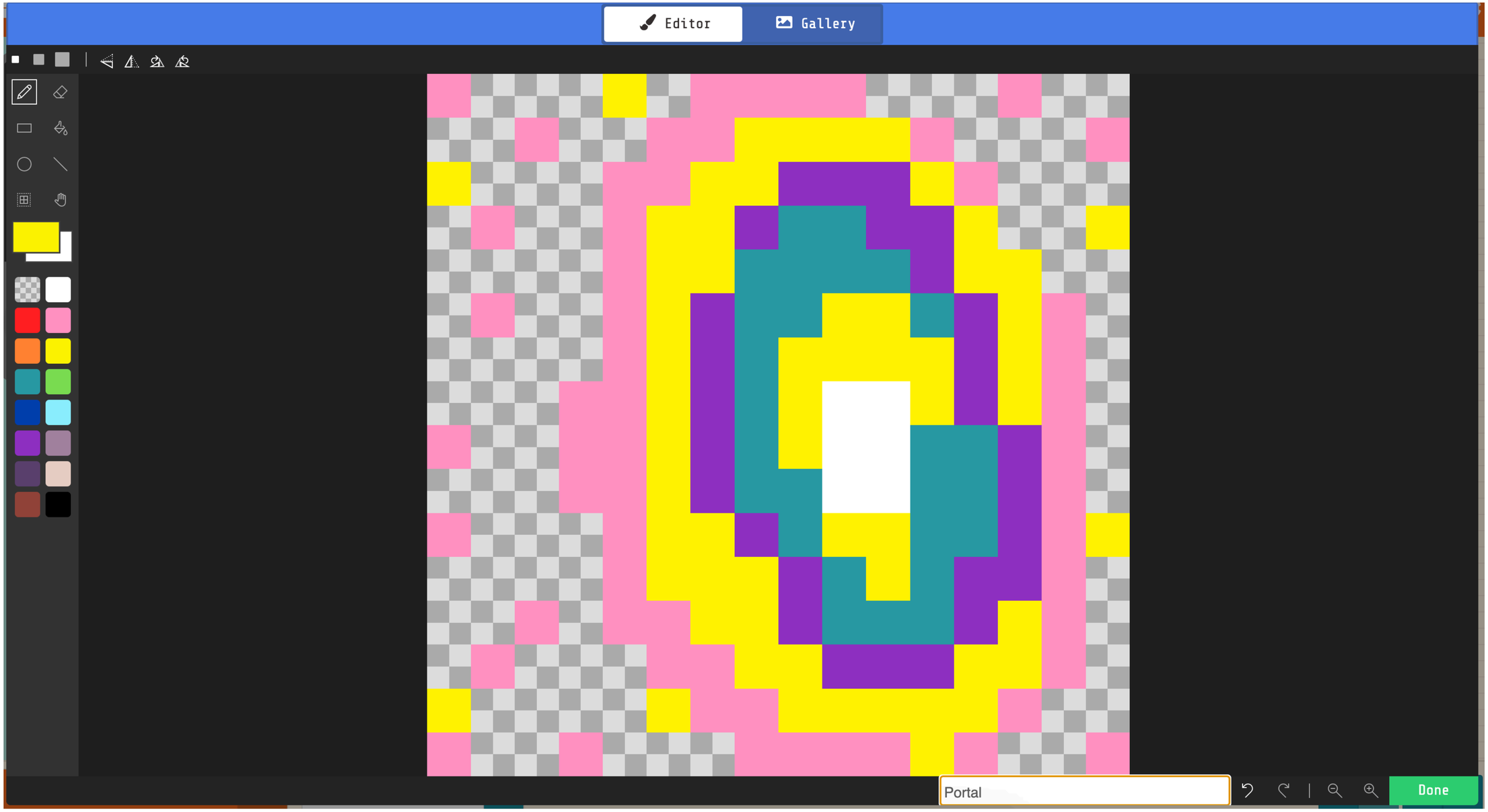


1 Click on the grey Tile Map box

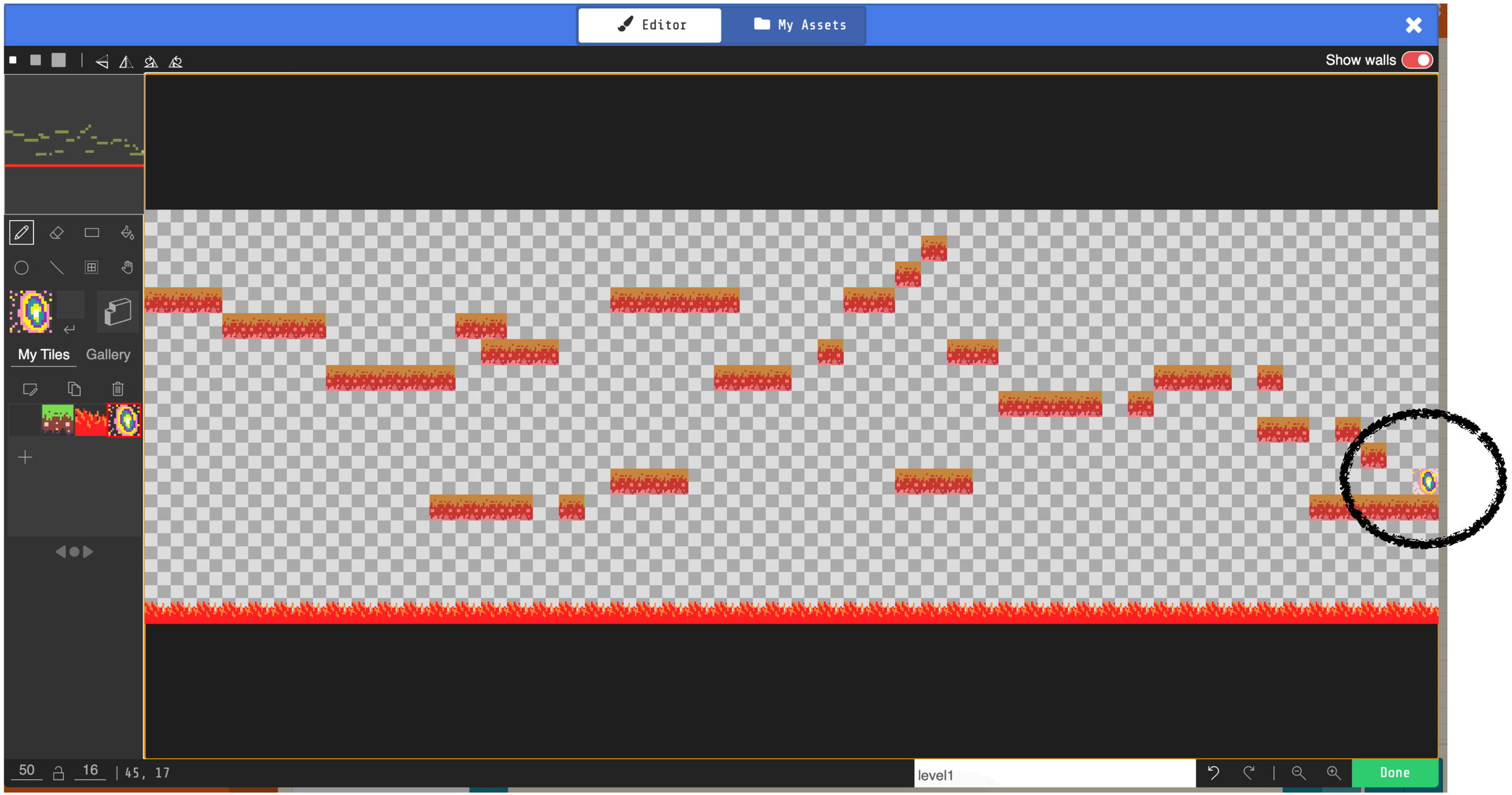


2 Click the + icon then make a Portal!

Step 6: Win the Game if you reach the Portal!



Step 6: Win the Game if you reach the Portal!



Position your Portal towards the end of your game

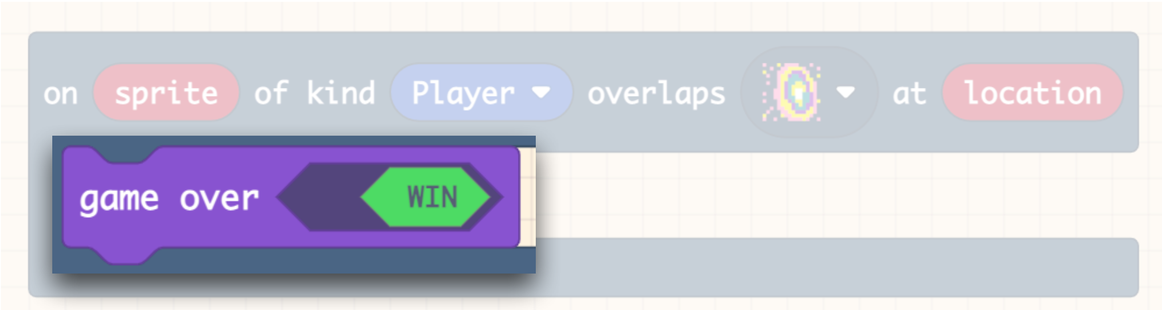
Step 6: Win the Game if you reach the Portal!

5

- Go to the Scene menu and drag in this code block
- Select your Portal tile

6

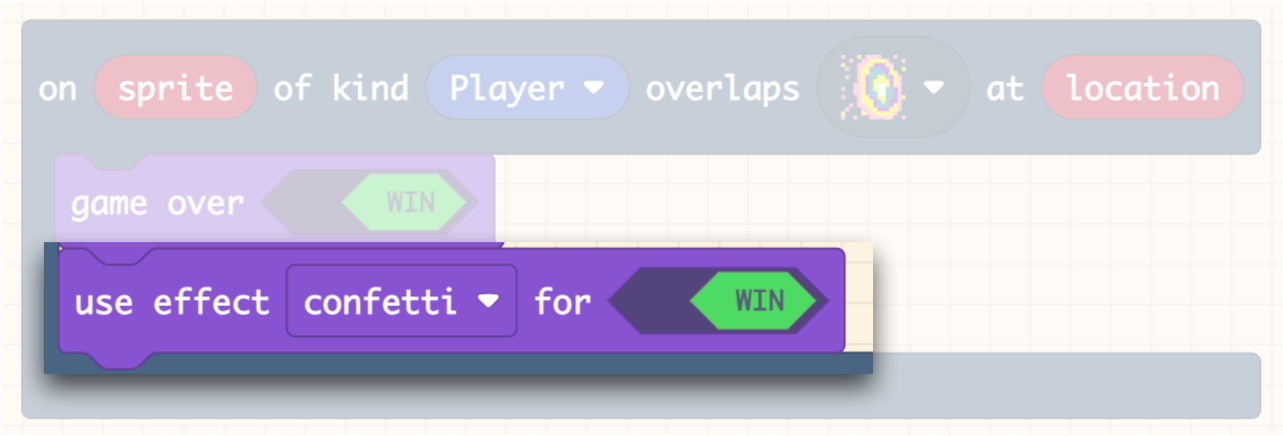
Go to the Game menu and drag in this block - set to **win**



Step 6: Win the Game if you reach the Portal!

7 

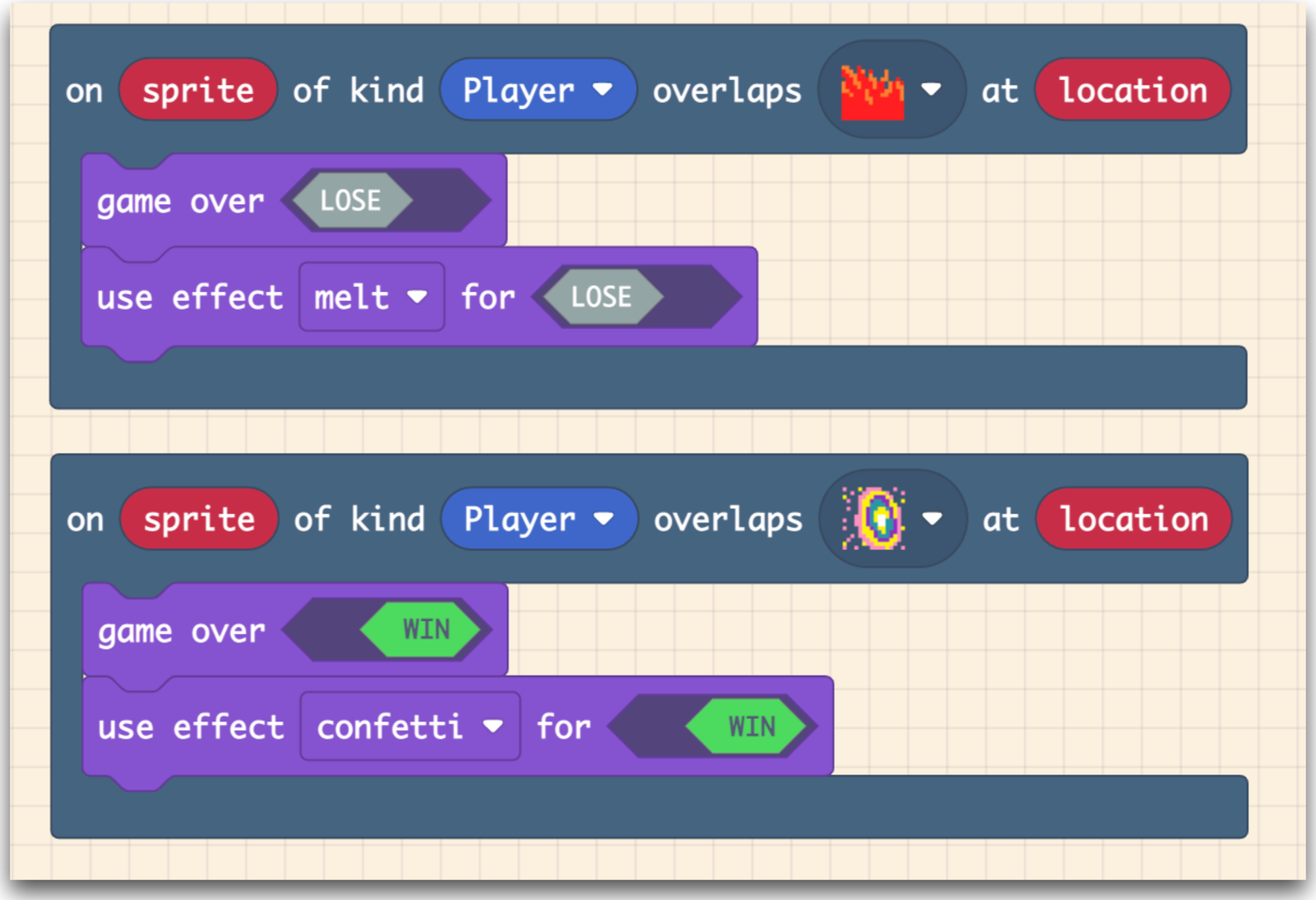
Go to the Game menu and drag in this block - set to **confetti effect if win**



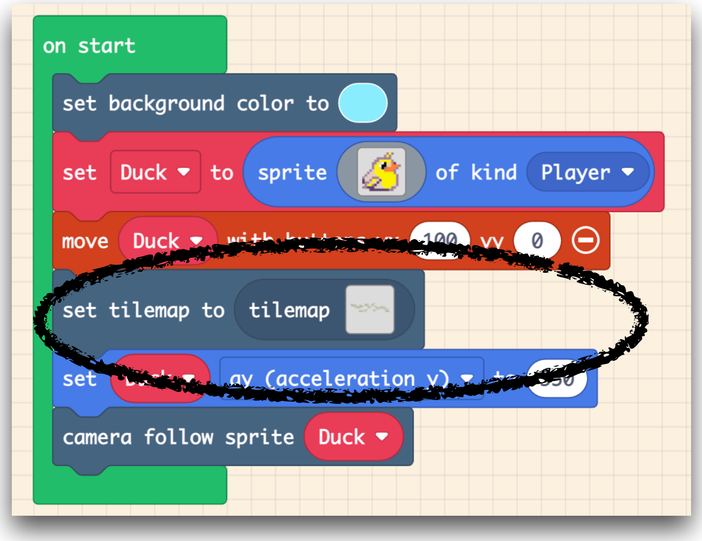
TEST YOUR GAME!

- If your Player reaches the portal the game should end
- You should see a pop up saying ‘You Win!’

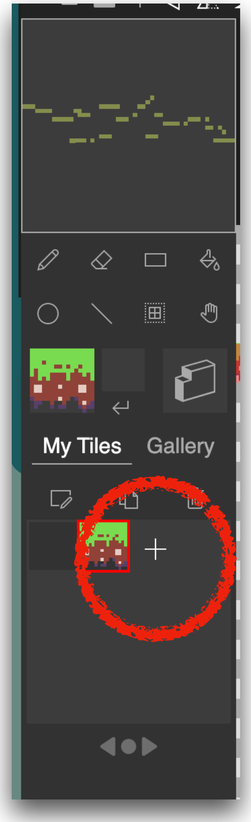
Your code should look like this



Step 7: Spawning Tiles to make Coins



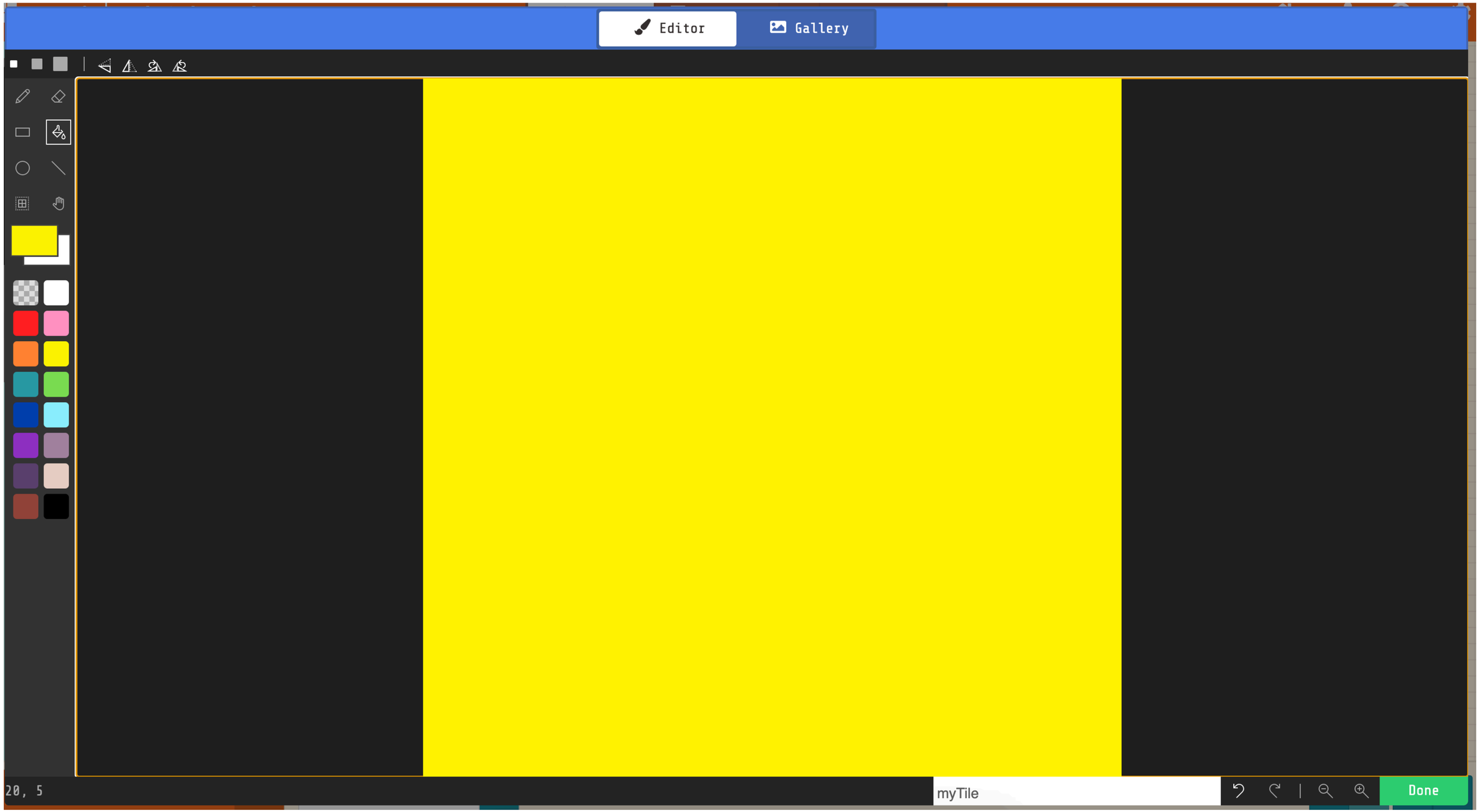
1 Click on the grey Tile Map box



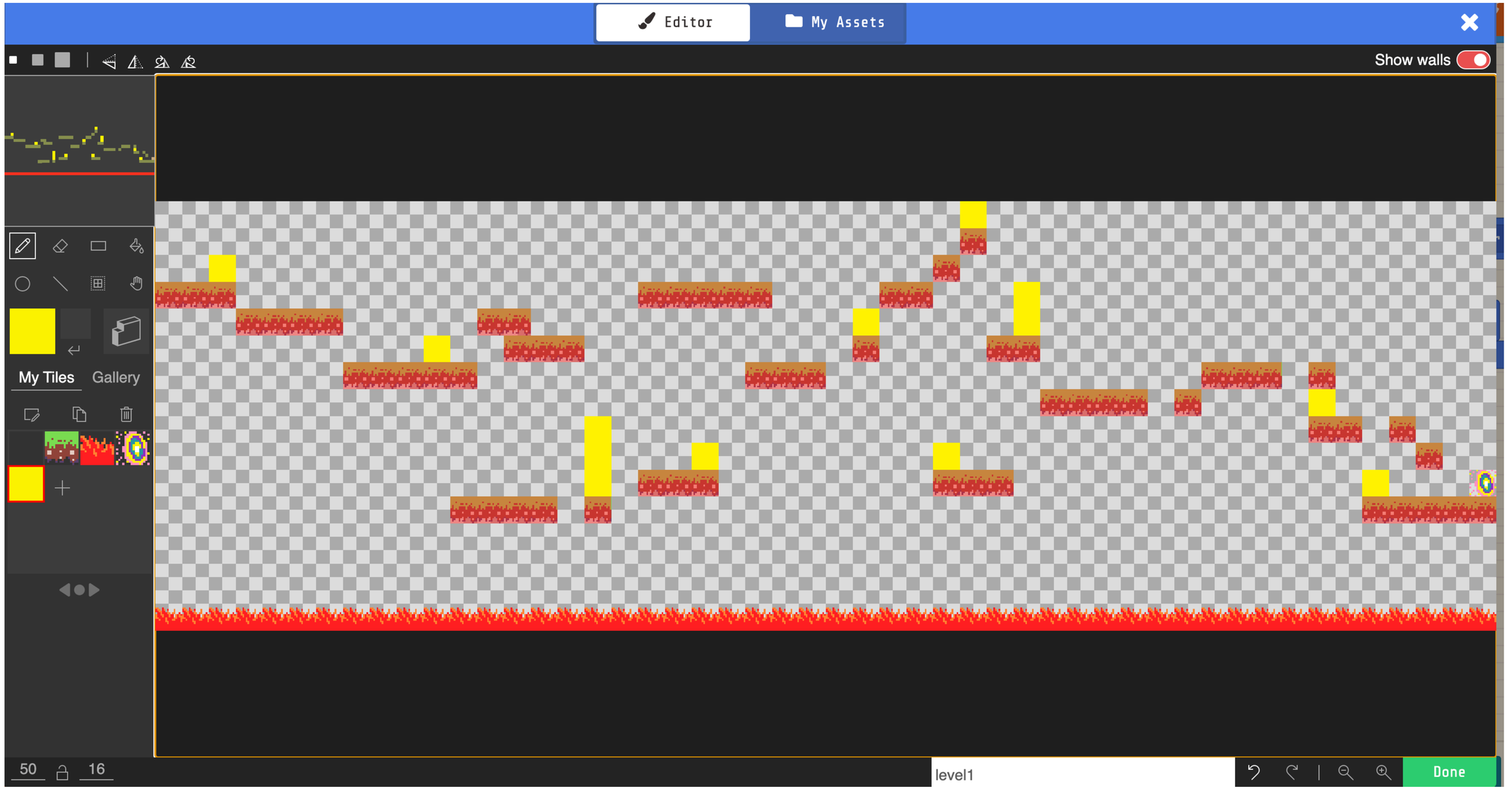
2 Click the + icon then make a yellow tile

Step 7: Spawning Tiles to make Coins

3

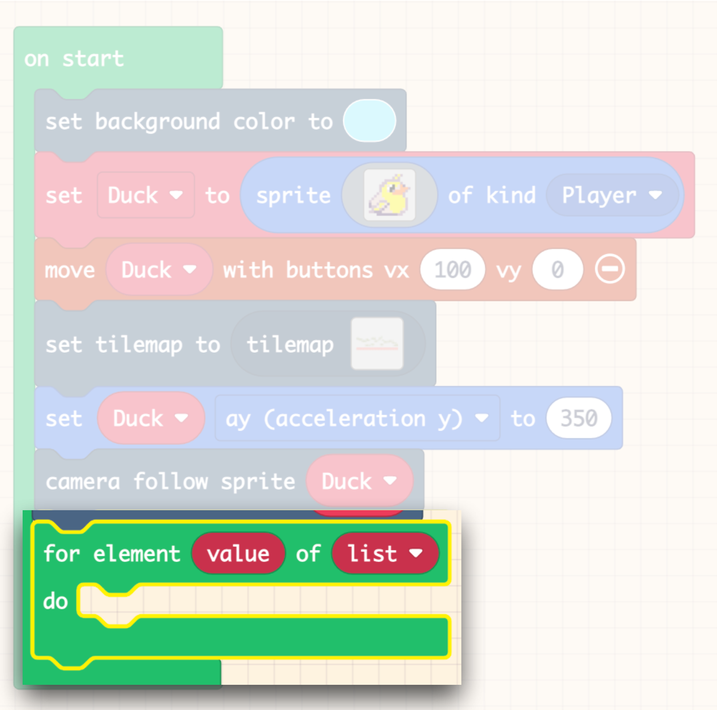


Step 7: Spawning Tiles to make Coins



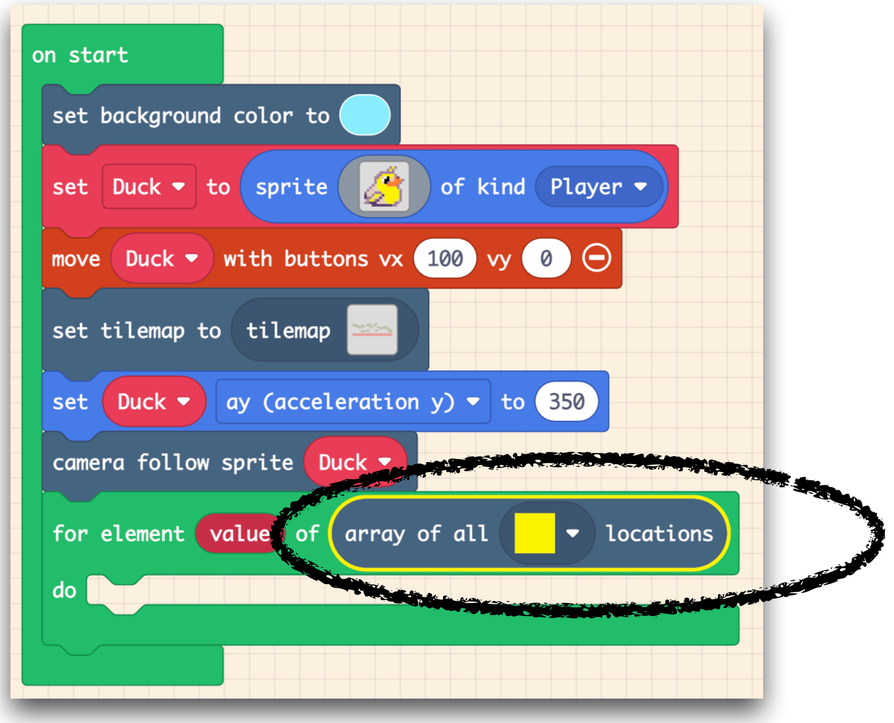
4 Paint a few coin tiles across your platform

Step 7: Spawning Tiles to make Coins



5 Loops

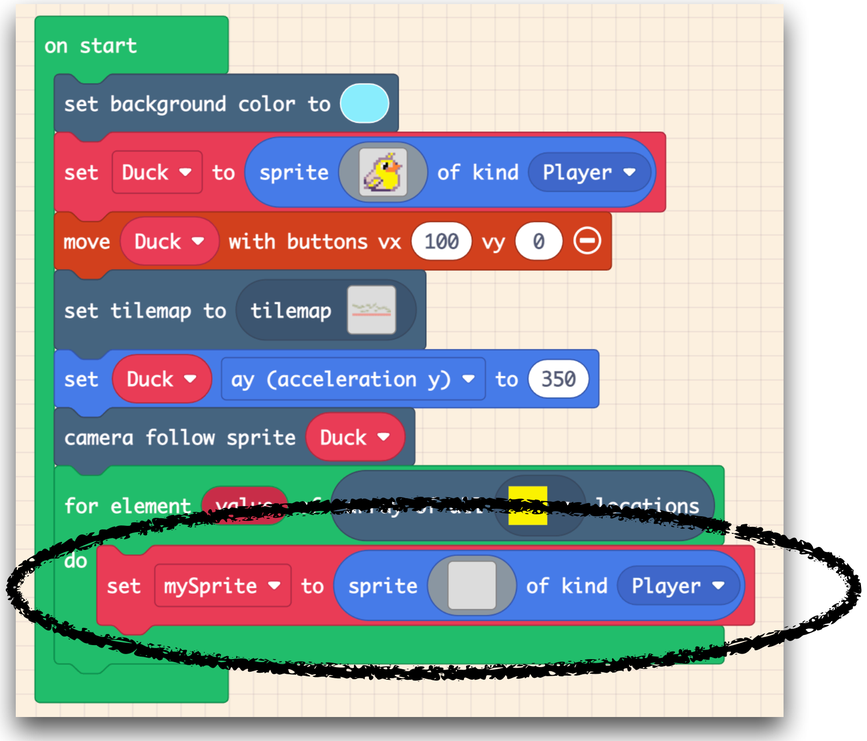
Go to the Loops menu and add the code block to the bottom of your **On Start** code



6 Scene

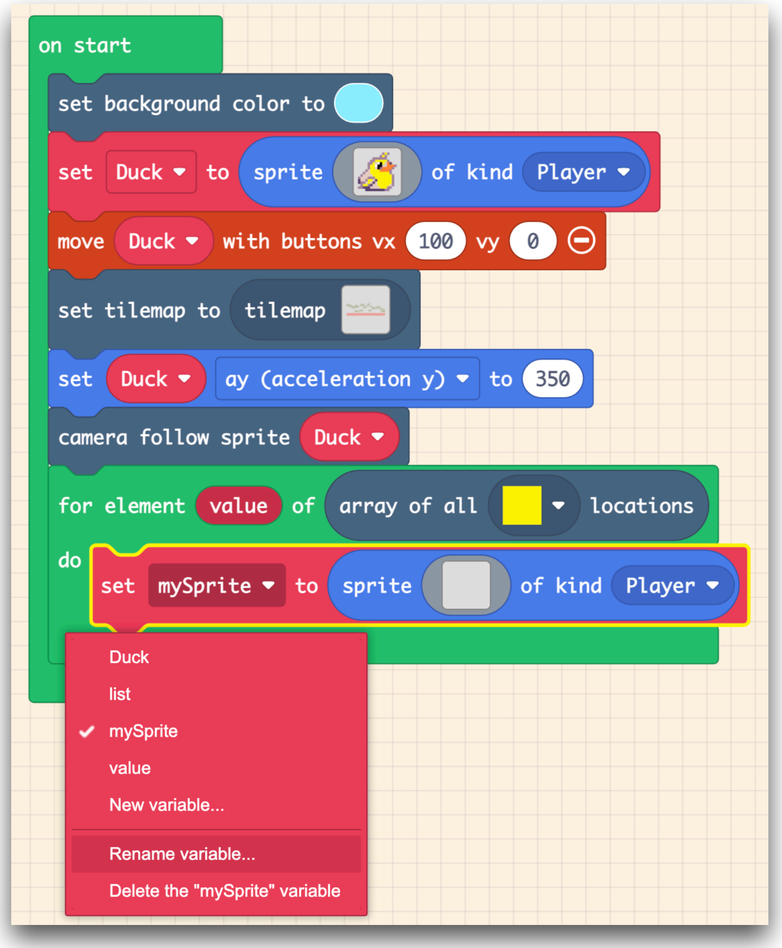
- Go to the Scene menu and add the code block to where it said ‘list’
- Select your yellow tile

Step 7: Spawning Tiles to make Coins



7 Sprites

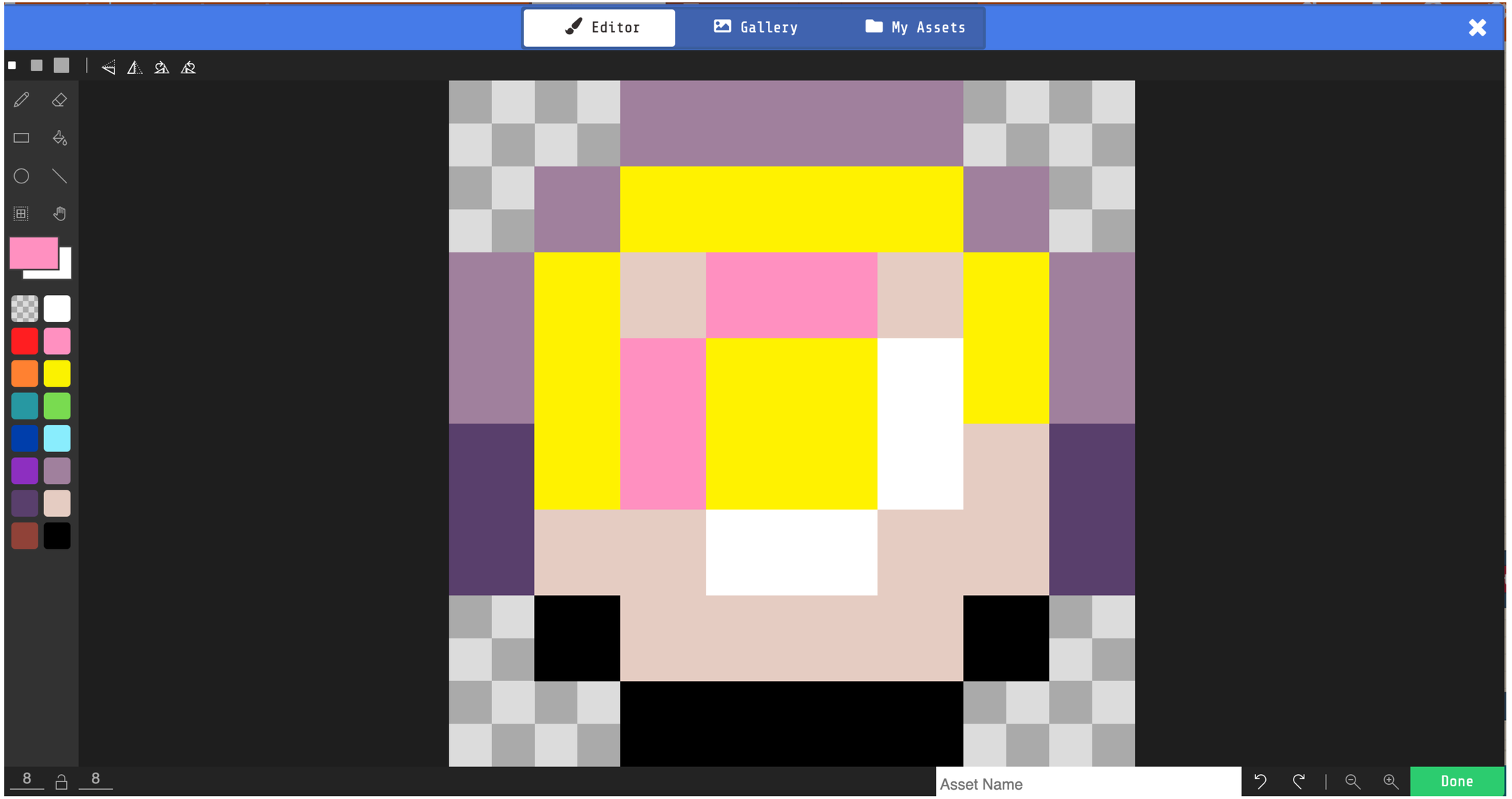
Go to the Sprites menu and add the code block



8
- Rename mySprite to **coin**
- Click on the grey tile and draw a coin or select a coin from the Gallery

Step 7: Spawning Tiles to make Coins

9



Step 7: Spawning Tiles to make Coins

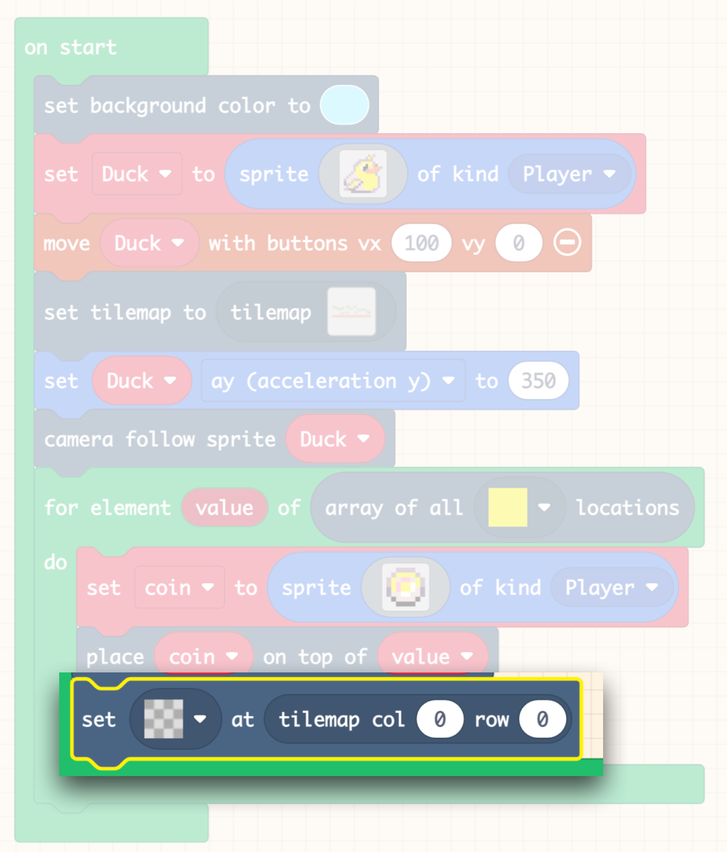
10

- Go to the Scene menu and add the code block
- Change where it says mySprite to **coin**

11

- Drag the value variable down to the block

Step 7: Spawning Tiles to make Coins



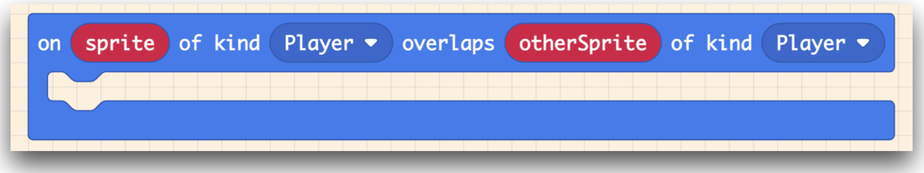
12

- Go to the Scene menu and add the code block

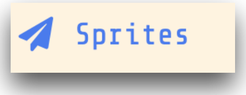
13

- Drag the value variable down to the block

Step 8: Allow the Player to pick up the coins



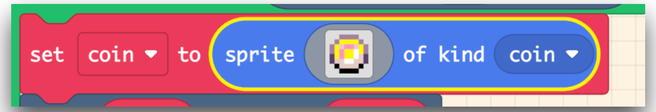
1



- Go to the Sprites menu and add the code block
- **This is a NEW LINE OF CODE**

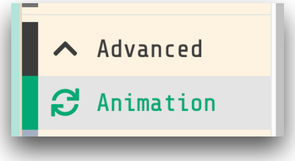
2

- Head back over to your ON START code
- Where you see the coin block **‘kind of player’** select ‘Add a new kind’ and call it **coin**

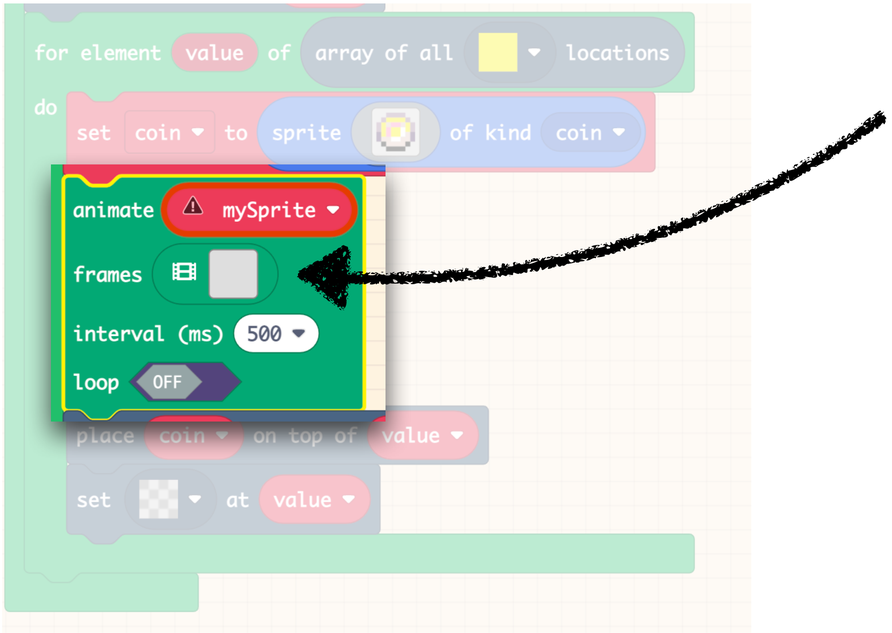


Step 8: Add a Coin Animation

1



- Go to the Advanced > Animation menu and drag in this code block

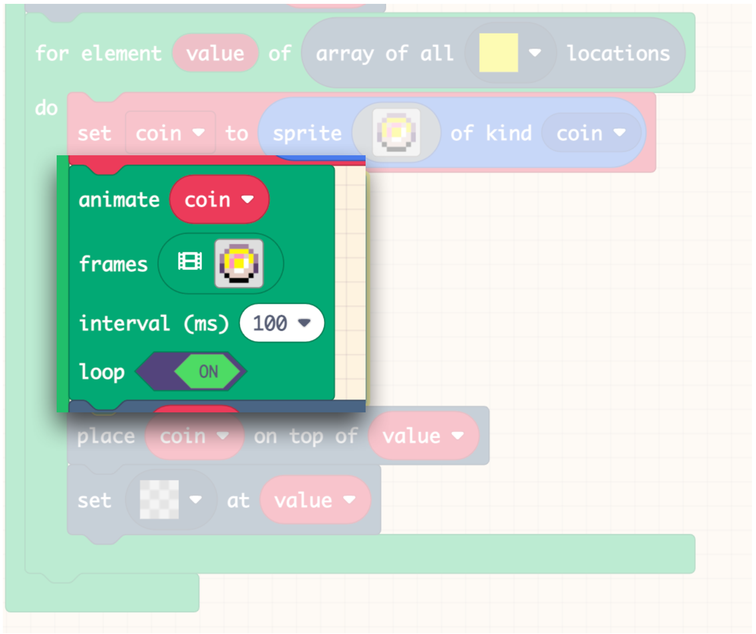


- Click the grey tile then head to Emma for an Animation walkthrough

Step 8: Add a Coin Animation

2

- After you have finished your animation, set the code to look like this



TEST YOUR GAME!

- Coins should be spinning on your game
- When you collect them you should see your points go up

Have you finished?

Why don’t you try to add some extra bits on your own!

Here are the next steps:

- Use the Coin tutorial to add in another tile, just like the coins, except **ORANGE**, make these enemies that subtract points!! (Choose your enemy)