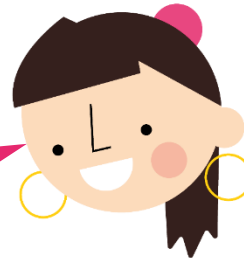
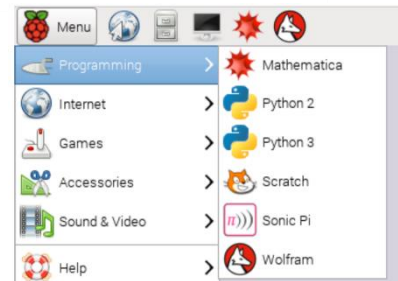


MAKE RANDOM SPARKLES USING SCRATCH



Getting started

- 1 Start Scratch (1.4) from the Menu



- 2 Create necessary variables:
AddOn, command, r, g, b, x, y

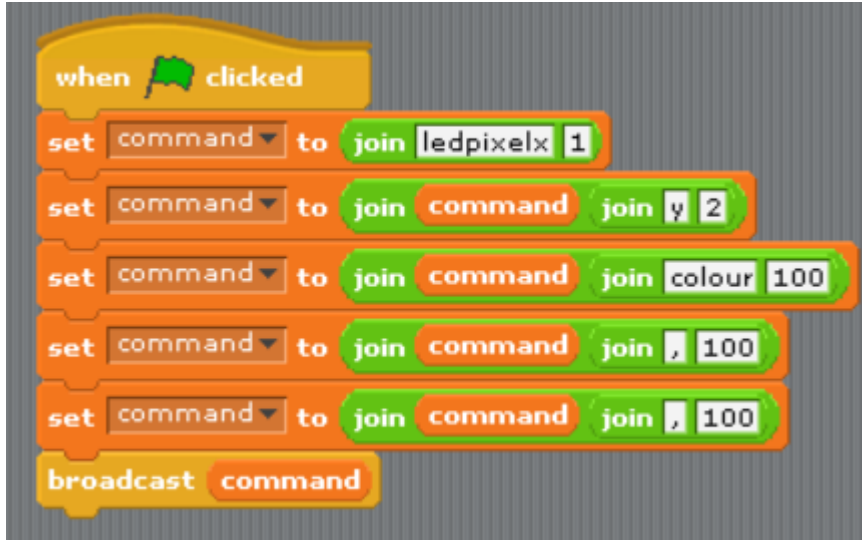



- 3 Start program (MAIN BLOCK) to tell Scratch you are using the `gpioserver`, `SenseHat` and then clear all the dots




Code to draw the Sparkles

- 1 Start a new block (PIXEL BLOCK) with the code to draw one sparkle. This is a second block of code.



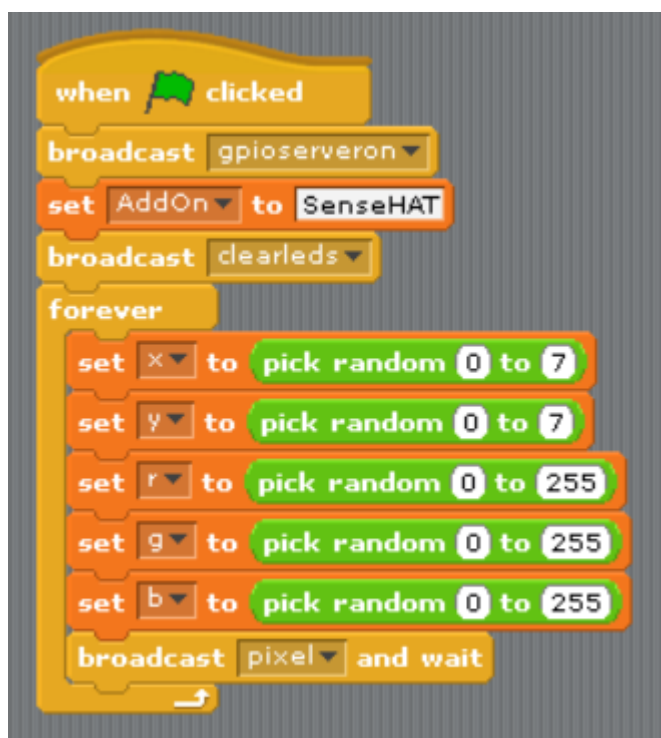
This creates a command that uses the values x , y to pick a dot and the values r , g , b to select a colour. **Be careful with all the green join blocks.** Click the green flag 

- 2 Have a play and try different x , y , r , g , b values. Then click the green flag to see the change 

You have now created the code to colour one dot. Fun, but wouldn't it be better if you could colour ALL the dots. That is what you will do next.

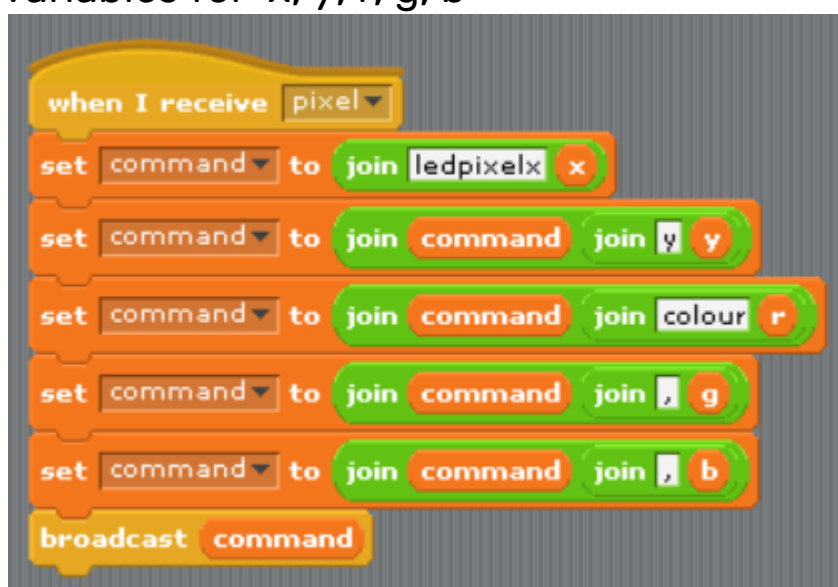
What if I love Red or Yellow or Green or Blue

- 3 Add the code to the MAIN BLOCK to pick random locations (x, y) and colours (r, g, b). Then send the command to draw the pixel to PIXEL BLOCK using broadcast. Make sure to add the [forever] so you get loads of sparkles.



- 4 The last command is `[broadcast [pixel] and wait]`

This is the command that tells the PIXEL BLOCK to draw the dot, so we need to change the first line in the PIXEL BLOCK to receive `[pixel]` code and include all the variables for x, y, r, g, b



- 1 Add commands to make all the new dots red, yellow, green or blue



Additional

- 1 It's all starting to look a bit busy. Wouldn't it be great if you could clear the SenseHat with a press of the [spacebar]



Challenges

- 1 Make it so there is always more red in the dots.
- 2 Make it take more time between drawing the dots?