

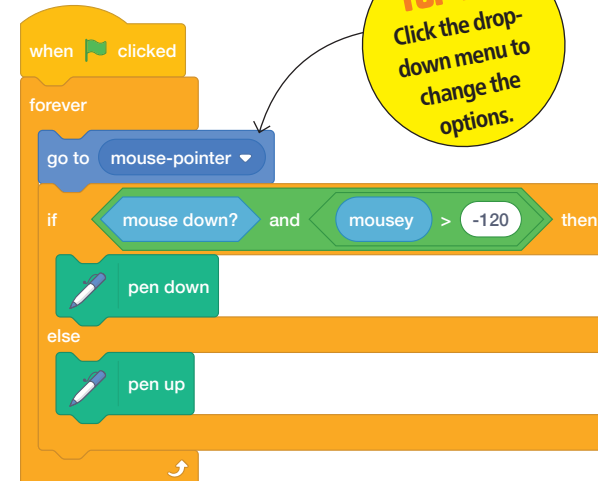
The coding club is your place to learn and develop coding skills. We've created these pages with the Raspberry Pi Foundation to provide loads of projects, from building games to designing animations.

# Code your own paint app

Get ready to create a digital drawing game.

## Move your pencil

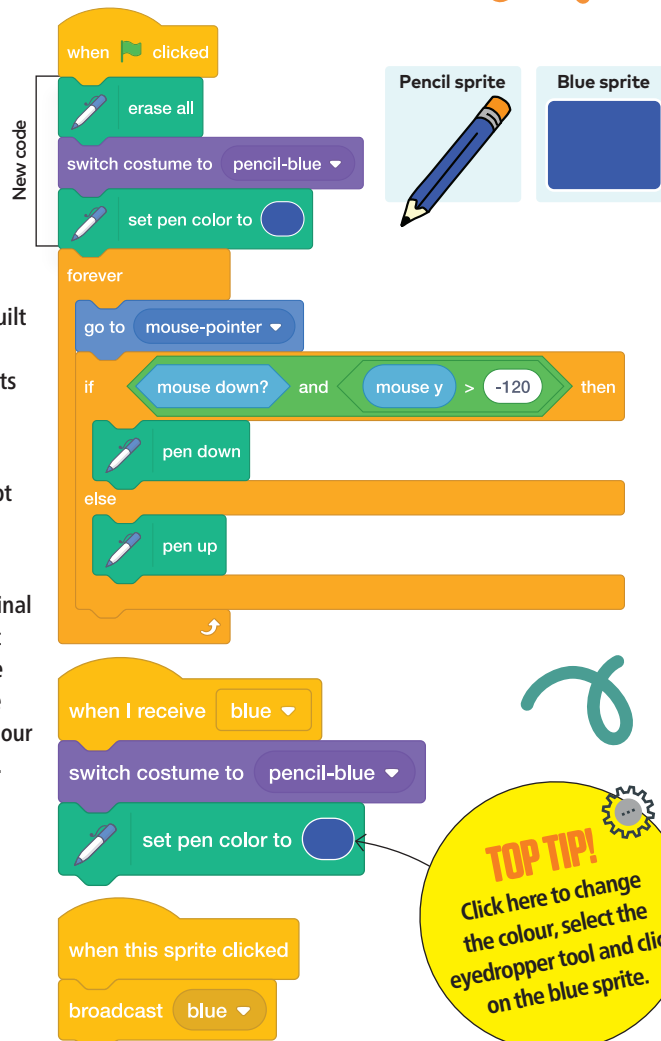
- 1 Open the "Paint box" Scratch starter project at [rpf.io/paint-box-sr](https://rpf.io/paint-box-sr)
- 2 First, add an extension. Click the button at the bottom left-hand corner of the screen (two wavy lines and a plus symbol) and select Add Extension. Click on the Pen extension.
- 3 Next, click on the pencil sprite and build the script below. A script is a stack of coding blocks that makes a list of instructions.
- 4 Click the green flag to check the pencil follows the mouse and draws when you hold the mouse button down.



**TOP TIP!**  
Click the drop-down menu to change the options.

## Changing colours

- 1 Now, you need to add some new coding blocks to the script you built in the first section. This clears your canvas and sets the default pen colour.
- 2 On the pencil sprite, build the second script (middle right).
- 3 Next, select the blue sprite and build the final script (bottom right). Test your game by clicking the green flag. You should be able to select the blue colour and draw with the pencil.



**TOP TIP!**  
Click here to change the colour, select the eyedropper tool and click on the blue sprite.

This project uses the Scratch programming language.

SCRATCH

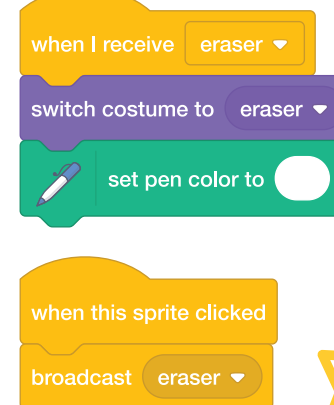
## Going green

- 1 Add coding blocks that let you change the colour of the pencil. Build the top script (right) on your pencil sprite. Select New message from the drop-down menu and type "green".
- 2 Now select the green sprite and build the next script (bottom right). Press the green flag to test that your pencil changes colour.



## Making changes

- 1 You might want to rub out a small part of your drawing. This is where the eraser sprite comes in. Build the top script (right) on the pencil sprite.
- 2 Select the eraser sprite and then click on Show. This will add the sprite as a button on the stage. Move the icon next to the colour blocks. Then build the second script (bottom right). Test your game again.



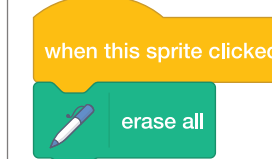
## GET DRAWING



## Deleting your drawing



- 1 Create a sprite to delete your drawing. To do this, click on the Choose a Sprite button at the bottom of the right-hand side of the screen and select the Block-X sprite. We changed the size of the X to 80 and made it red by selecting the Costumes tab and changing the Fill colour.
- 2 Build the script below on the Block-X sprite. Your painting app is now ready to play.



The Raspberry Pi Foundation is a UK-based charity with the mission to enable young people to realise their full potential through the power of computing and digital technologies. Discover more step-by-step coding projects at [rpf.io/scienceandnature](https://rpf.io/scienceandnature)



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