Processing 2
RGB Colour

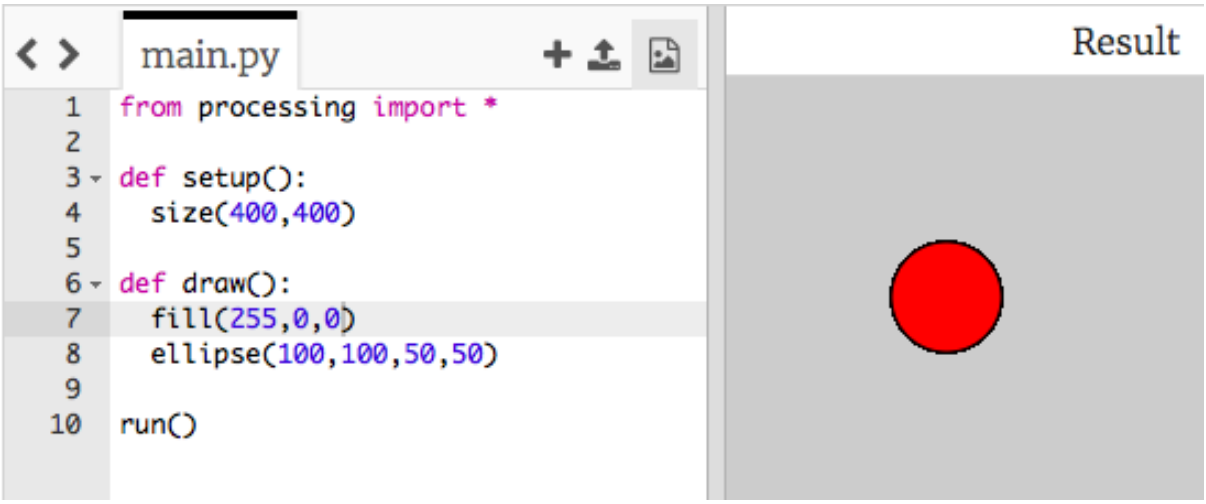
We've created some Python introductory exercises for you to work through. We will use a web-site called Trinket to run Python. Type **trinket.io** in the browser. You will need an email address to **sign-up**.

1) Open the previous trinket. You should be able to find a button like "**View All My Trinkets**" or the **"My Trinkets"** menu.

2) Change the colour of a shape using the **fill** function.

3) Colours are a mixture of three primary colours: **red**, **green**, and **blue**. The brightness of each colour is given by a number between 0 (off) and 255 (full brightness).

4) Call the **fill(R,G,B)** function before drawing the shape, where R,G,B are the Red, Green, and Blue levels. This draws a red circle.



5) If you want to get rid of the edge around a shape, you can use the **noStroke** function before drawing it.

Does it still look two-dimensional without the edge?

6) We can also change the colour of the stroke in the same way we set the fill colour, specifying Red, Green, and Blue levels. We can do this by calling the **stroke(R,G,B)** function before

drawing the ellipse shape. For example, **stroke(0,0,0)** sets up for a black stroke.

It's now like a simple drawing tool.

7) Change the background colour of the canvas with the **background** function. Let's make the background blue.

8) Try changing the background by adding it to the end of setup as above, and at the beginning of draw.

Can you explain the difference?

9) We can make the colours change over time by replacing any of the RGB values with a number that gradually changes from 0 to 255. There's a built-in variable called **frameCount** that increases by 1 for each *frame* it **draws**. If we divide this by 256 and take the remainder (The % operator) we're left with a number from 0 to 255. Try to work out where to put this:

frameCount%256

10) Instead of RGB colours, we can also use a single number specify a value on a grey-scale, including all the greys from black to white. This grey-scale runs from 0 (black) to 255 (white).

11) Click **Save** to save your program