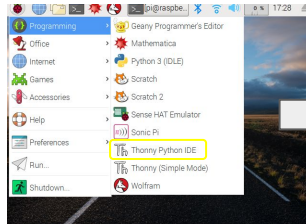


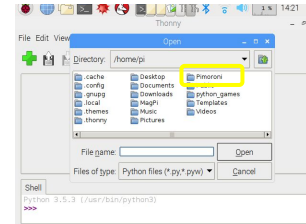
# Playing with colours

When you install the Blinkt library, a number of examples are installed, you'll find them in **Pimoroni/blinkt/examples**  
This activity uses **solid\_colours.py**

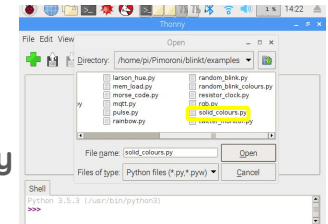
From the Programming menu, load Thonny Python IDE.



Open the program by clicking through the folders until you are in the examples folder for Blinkt.



Load the program **solid\_colours.py**



```
#!/usr/bin/env python

import time

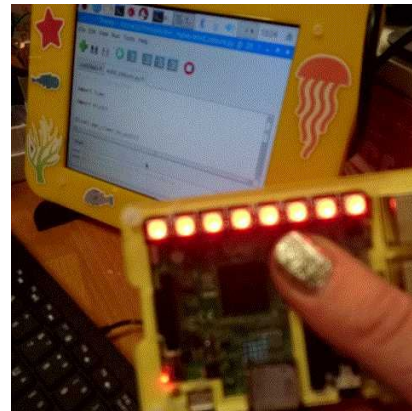
import blinkt

blinkt.set_clear_on_exit()

step = 0

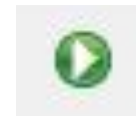
while True:
    if step == 0:
        blinkt.set_all(128, 0, 0)
    if step == 1:
        blinkt.set_all(0, 128, 0)
    if step == 2:
        blinkt.set_all(0, 0, 128)

    step += 1
    step %= 3
    blinkt.show()
    time.sleep(0.5)
```



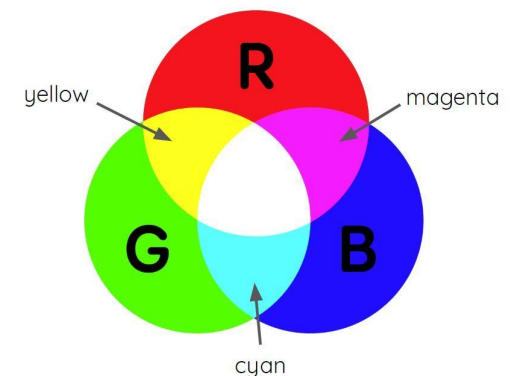
## Task - Run a Program

Make sure the Blinkt is attached correctly to your Raspberry Pi, then press the **play** button to run the program.



## Task - Find the colour codes for the eight main colour mixes.

You can only use the number 0 or the number 100. Try out different combinations and see if you can find the primary colours of light (red, green and blue), the secondary colours of light (yellow, magenta, and cyan), all of the light colours (white) and no light (black/off).



You should see it flashes a pattern of colours. Colours in this program are represented by what we call a *tuple* (three values in brackets). See if you can find them in this program.

## Task - Alter an Existing Program

Now try changing some of the numbers in the brackets that represent the colours. Press play and run the program again. What has happened?