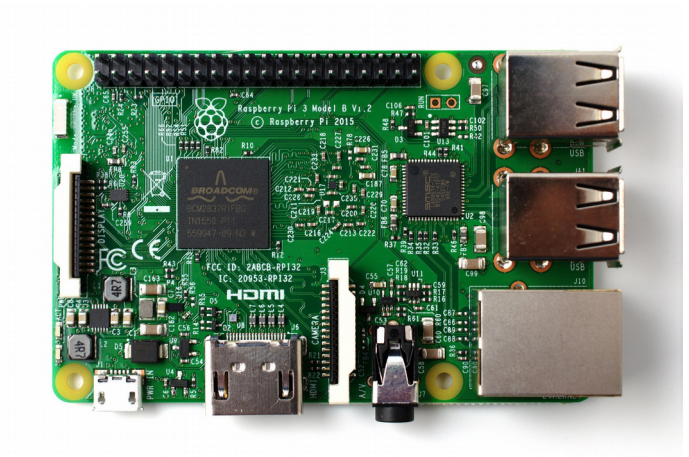
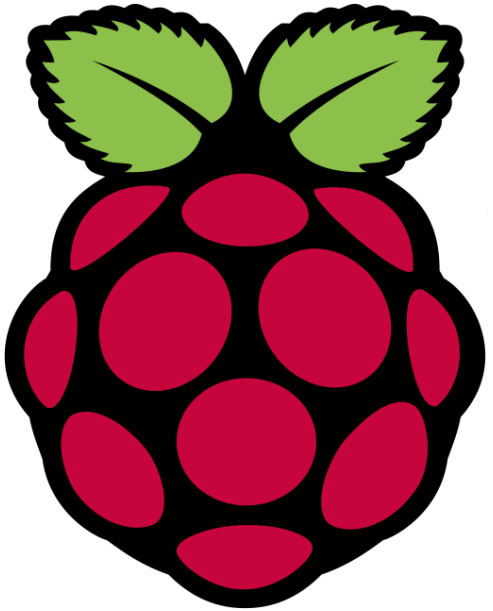
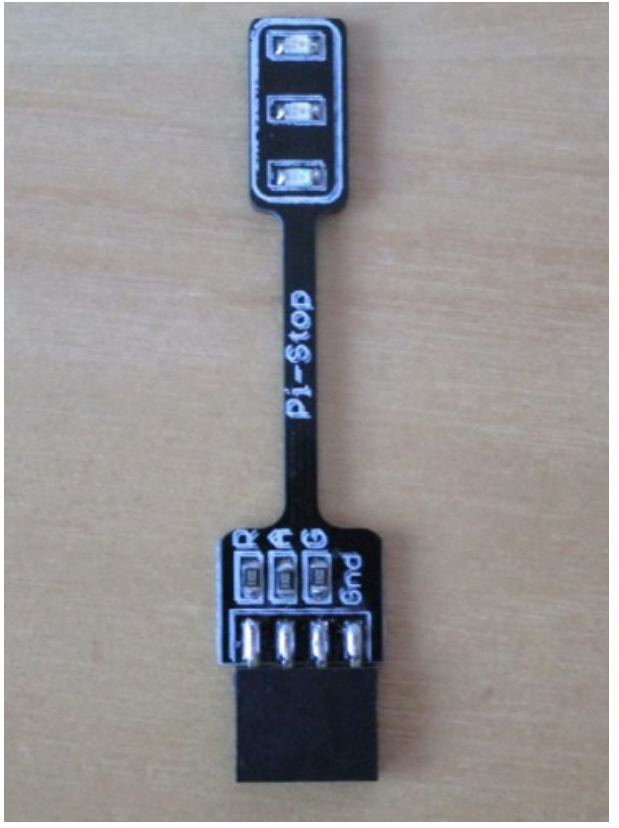
Traffic Lights controller with gpiozero and guizero



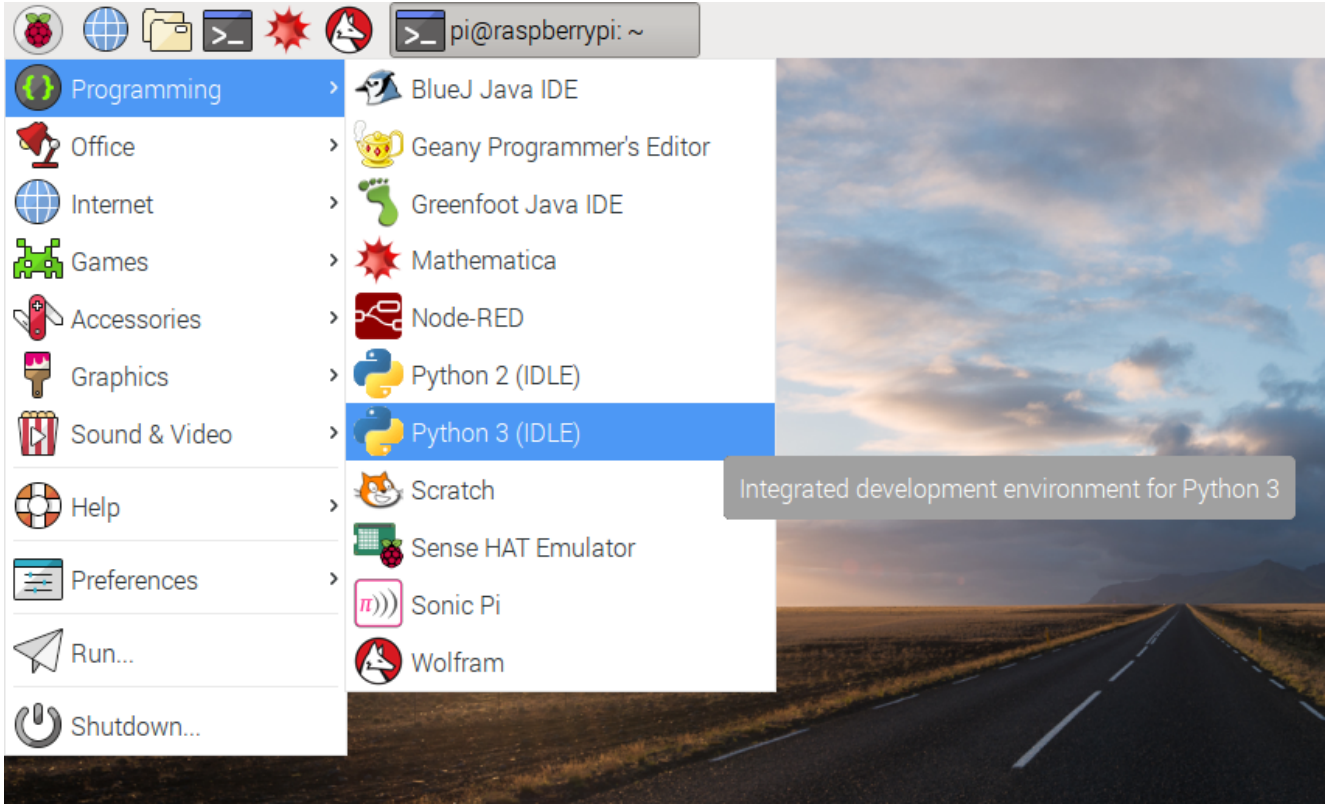


pi-stop

- GND
- GPIO17 (green)
- GPIO27 (amber)
- GPIO22 (red)



Open Python 3



gpiozero

```
from gpiozero import LED

red = LED(22)

red.blink()
```

gpiozero

```
from gpiozero import TrafficLights

lights = TrafficLights(22, 27, 17)

lights.blink()
```

gpiozero

```
from gpiozero import TrafficLights

lights = TrafficLights(22, 27, 17)

lights.red.blink(1, 1)
lights.amber.blink(2, 2)
lights.green.blink(3, 3)
```

guizero

```
from gpiozero import LED
from guizero import App, Text, PushButton

lights = TrafficLights(22, 27, 17)

app = App()

PushButton(app, command=red.on, text="on")

app.display()
```

guizero

```
app = App()


Text(app, "Red")
PushButton(app, command=lights.red.on, text="on")
PushButton(app, command=lights.red.off, text="off")


app.display()
```

guizero

```
app = App("Traffic Lights controller", layout="grid")

Text(app, "Red", grid=[0, 0])
PushButton(app, command=red.on, text="on", grid=[1, 0])
PushButton(app, command=red.off, text="off", grid=[2, 0])

...

app.display()
```

Challenges

- Controls for all 3 LEDs – red, amber and green
- Properly aligned in grid
- on/off/blink buttons
- All on / all off button
- Traffic Lights sequence button