

Cambridge Raspberry Jam

Name

Age

Parent

Beginners worksheet #2

Project Simple LED with python

Description In this project you will learn how to turn an LED on and off.

Tools required

☐ Raspberry Pi + SD card

☐ Breadboard

☐ Keyboard

☐ 1 X Red LED

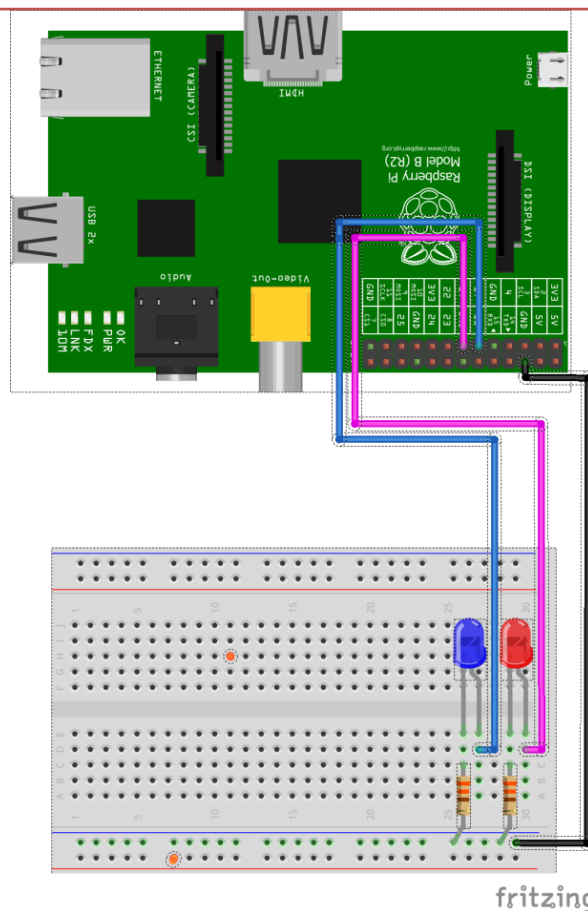
☐ Monitor + HDMI cable

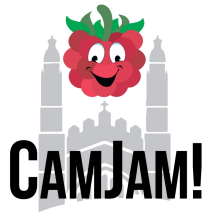
☐ 1 X Blue LED

☐ Power supply

☐ 2 x 330 Ω resistors

☐ 3 x m/f jumper wires





Code

TURN ON THE LEDS "2_on.py"

```
#!/usr/bin/python
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BCM)
GPIO.cleanup()
GPIO.setwarnings(False)
GPIO.setup(17,GPIO.OUT)
GPIO.setup(27,GPIO.OUT)
print "Lights on"
GPIO.output(17,GPIO.HIGH)
GPIO.output(27,GPIO.HIGH)
```

TURN OFF THE LEDS "2_off.py"

```
#!/usr/bin/python
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BCM)
GPIO.cleanup()
GPIO.setwarnings(False)
GPIO.setup(17,GPIO.OUT)
GPIO.setup(27,GPIO.OUT)
print "Lights on"
GPIO.output(17,GPIO.LOW)
GPIO.output(27,GPIO.LOW)
```

1. Create file "touch 2_on.py"

2. Create file "touch 2_off.py"

3. Enter the code above code

Once complete "Ctrl + x" then "y" then "enter"

4. To run the python code "sudo python 2_on.py" << Watch LEDS turn on

5. To run the python code "sudo python 2_off.py" << Watch LEDS turn off