Cambridge Raspberry Jam

Name	
Age	
Parent	

Beginners worksheet #4

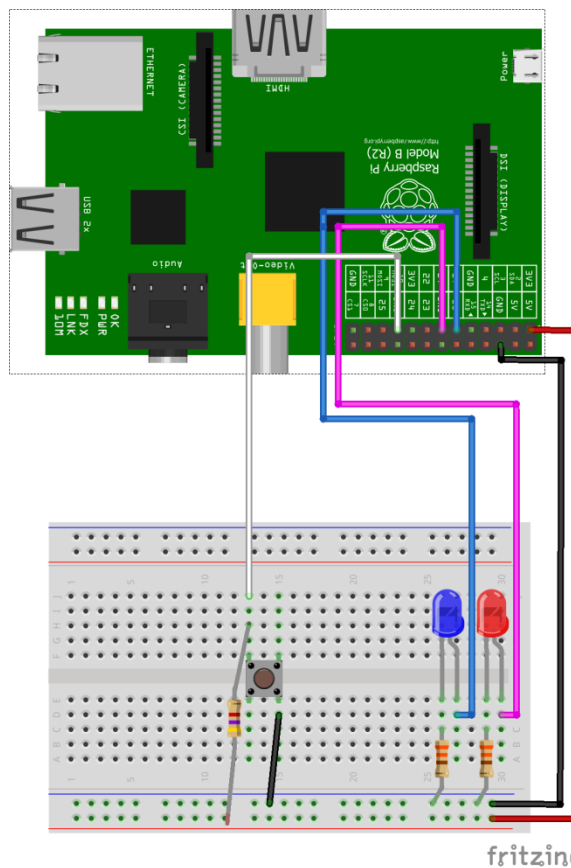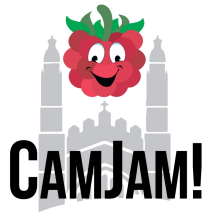|	
Project	Push button for physical input
Description	In this project you will learn how to wire and program a push button for physical input.

Tools required

☐ Raspberry Pi + SD Card	☐ 1 X Red LED
☐ Keyboard	☐ 1 X Blue LED
☐ Monitor + HDMI cable	☐ 2 x 330 Ω resistors
☐ Power supply	☐ 5 x m/f jumper wires
☐ Breadboard	☐ 4.7k Ω resistors
☐ Push button	☐ 1 m/m jumper wire

TURN ON THE LEDS "4_button.py"

```python
#!/usr/bin/python
import os
import time
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BCM)

GPIO.setwarnings(False)
GPIO.setup(10, GPIO.IN)

print("------------------")
print(" Button + GPIO ")
print("------------------")

print GPIO.input(10)
while True:
    if ( GPIO.input(10) == False ):
        print("Button Pressed")
        os.system('date')
        print GPIO.input(10)
        time.sleep(5)
    else:
        os.system('clear')
        print ("Waiting for you to press a button")
time.sleep(1)
```

1. Change directory "cd Desktop/gpio_python_code/"
2. Create file "touch 4_button.py"
3. Enter the code above code
Once complete "Ctrl + x" then "y" then "enter"
4. To run the python code "sudo python 4_button.py"