

Cambridge Raspberry Jam

Name

Age

Parent

Beginners worksheet #5

Project Interact with the user and input your choice.

Description In this project you will controller either the red or blue led depending on what your chose.

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

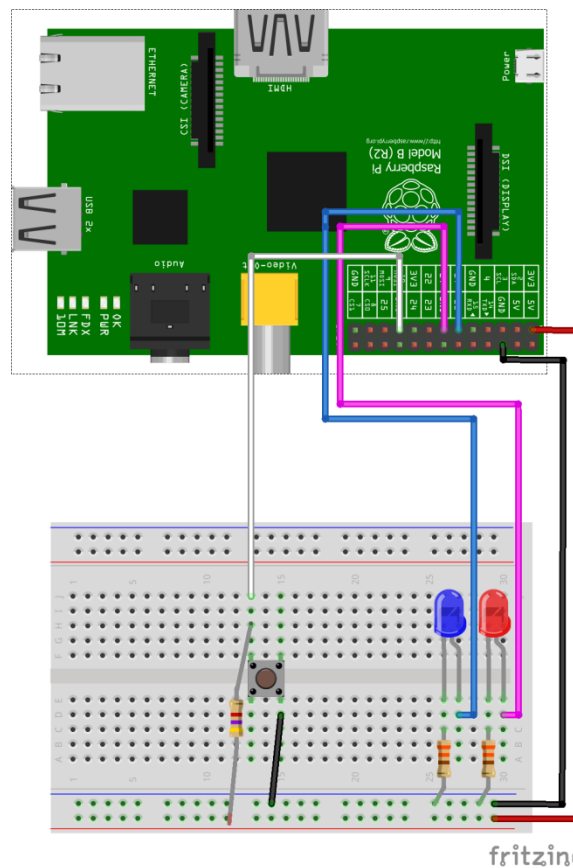
☐ 5 x m/f jumper wires

☐ Breadboard

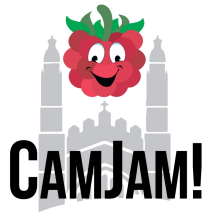
☐ 1 4.7k Ω resistors

☐ Push Button

☐ 1 m/m jumper wire



fritzing



Code

TURN ON THE LEDS "6_user_input_blink.py"

```
#!/usr/bin/python
import os
import time
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BCM)
GPIO.setwarnings(False)
GPIO.setup(17,GPIO.OUT)
GPIO.setup(27,GPIO.OUT)

#Setup variables for user input
led_choice = 0
count = 0

os.system('clear')

print "Which LED would you like to blink"
print "1: Red?"
print "2: Blue?"

led_choice = input("Choose your option: ")

if led_choice == 1:
    os.system('clear')
    print "You picked the Red LED"
    count = input("How many times would you like it to blink?: ")
    while count > 0:
        GPIO.output(27,GPIO.HIGH)
        time.sleep(1)
        GPIO.output(27,GPIO.LOW)
        time.sleep(1)
        count = count - 1

if led_choice == 2:
    os.system('clear')
    print "You picked the Red LED"
    count = input("How many times would you like it to blink?: ")
    while count > 0:
        GPIO.output(17,GPIO.HIGH)
        time.sleep(1)
        GPIO.output(17,GPIO.LOW)
        time.sleep(1)
        count = count - 1
```

1. Change directory "cd Desktop/gpio_python_code/"

2. Create file "touch 6_user_input_blink.py"

3. Enter the code above code

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

4. To run the python code "sudo python 6_user_input_blink.py" << Run through the questions and make an LED blink.