CamJam!

Cambridge Raspberry Jam

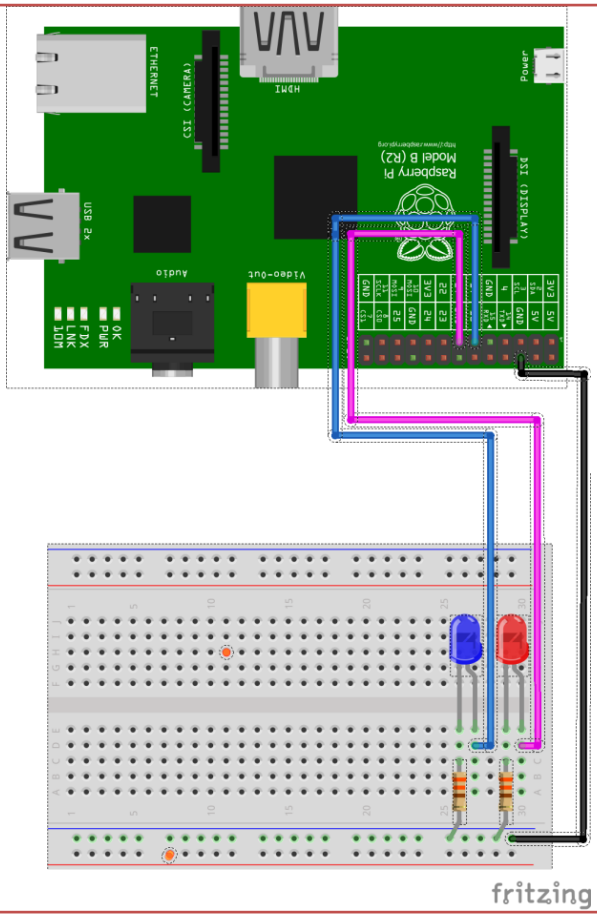
Name
Age
Parent

Beginners worksheet #3

Project	Simple blinking LED with python
Description	In this project you will learn how to make an LED blink

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 "3_blink.py"

```
#!/usr/bin/python
import time
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BCM)
GPIO.setwarnings(False)
GPIO.setup(17,GPIO.OUT)
GPIO.setup(27,GPIO.OUT)
#Turn LEDs on
GPIO.output(17,GPIO.HIGH)
GPIO.output(27,GPIO.HIGH)
time.sleep(1)
#Turn LEDs off
GPIO.output(17,GPIO.LOW)
GPIO.output(27,GPIO.LOW)
time.sleep(1)
#Turn LEDs on
GPIO.output(17,GPIO.HIGH)
GPIO.output(27,GPIO.HIGH)
time.sleep(1)
#Turn LEDs off
GPIO.output(17,GPIO.LOW)
GPIO.output(27,GPIO.LOW)
GPIO.cleanup
```

TURN ON THE LEDS "3_blink_forever.py"

```
#!/usr/bin/python
import time
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BCM)
GPIO.setwarnings(False)
GPIO.setup(17,GPIO.OUT)
GPIO.setup(27,GPIO.OUT)
while 1:
      GPIO.output(17,GPIO.HIGH)
      GPIO.output(27,GPIO.HIGH)
      time.sleep(1)
      GPIO.output(17,GPIO.LOW)
      GPIO.output(27,GPIO.LOW)
      time.sleep(1)
```

1. Change directory "**cd Desktop/gpio_python_code/**"
2. Create file "**touch 3_blink.py**"
3. Create file "**touch 3_blink_forever.py**"
4. Enter the code above code

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

5. To run the python code "**sudo python 3_blink.py**" << Watch the LEDs blink 2 times
6. To run the python code "**sudo python 3_blink_forever.py**" << Watch the LEDs blink forever