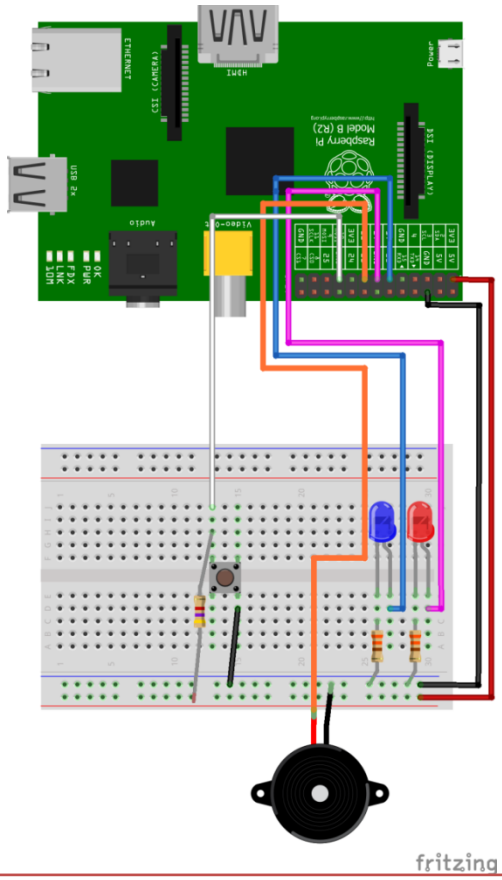
CamJam!

Cambridge Raspberry Jam
Name
Age
Parent

Beginners worksheet #6	
Project	Buzzer – Morse code sos
Description	In this project you will learn how to wire and program a buzzer. Let's all make lots of annoying noises. This will be an SOS program

Tools required		
☐ Raspberry Pi SD card	☐ 1 X Red LED	☐ 6 x m/f jumper wires
☐ Keyboard	☐ 1 X Blue LED	☐ 2 m/m jumper wire
☐ Monitor + Cable	☐ 2 x 330 Ω resistors	☐ Buzzer
☐ Power supply	☐ 4.7k Ω resistors	
☐ Breadboard	☐ Push button	



Code

TURN ON THE LEDS "6_morsecode.py"

```
#!/usr/bin/python
import os
import time
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BCM)
GPIO.setwarnings(False)
GPIO.setup(22,GPIO.OUT)

loop_count = 0

def morsecode ():

      #Dot Dot Dot
      GPIO.output(22,GPIO.HIGH)
      time.sleep(.1)
      GPIO.output(22,GPIO.LOW)
      time.sleep(.1)
      GPIO.output(22,GPIO.HIGH)
      time.sleep(.1)
      GPIO.output(22,GPIO.LOW)
      time.sleep(.1)
      GPIO.output(22,GPIO.HIGH)
      time.sleep(.1)

      #Dash Dash Dah
      GPIO.output(22,GPIO.LOW)
      time.sleep(.2)
      GPIO.output(22,GPIO.HIGH)
      time.sleep(.2)
      GPIO.output(22,GPIO.LOW)
      time.sleep(.2)
      GPIO.output(22,GPIO.HIGH)
      time.sleep(.2)
      GPIO.output(22,GPIO.LOW)
      time.sleep(.2)
      GPIO.output(22,GPIO.HIGH)
      time.sleep(.2)
      GPIO.output(22,GPIO.LOW)
      time.sleep(.2)

      #Dot Dot Dot
      GPIO.output(22,GPIO.HIGH)
      time.sleep(.1)
      GPIO.output(22,GPIO.LOW)
      time.sleep(.1)
      GPIO.output(22,GPIO.HIGH)
      time.sleep(.1)
```

```
        GPIO.output(22,GPIO.LOW)
        time.sleep(.1)
        GPIO.output(22,GPIO.HIGH)
        time.sleep(.1)
        GPIO.output(22,GPIO.LOW)
        time.sleep(.7)

os.system('clear')
print "Morse Code"
loop_count = input("How many times would you like SOS to loop?: ")
while loop_count > 0:
        loop_count = loop_count - 1
        morsecode ()
```

1. Change directory "**cd Desktop/gpio_python_code/**"
2. Create file "**touch 6_morsecode.py**"
3. Enter the code above code

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

4. To run the python code "**sudo python 6_morsecode.py**" << listen to it beep SOS