2015



Interfacing Buzzer with Raspberry PI



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Introduction:

Raspberry Pi is a credit card sized computer that plugs into a computer monitor or TV, and uses standard keyboard and mouse. It's capable of doing everything you'd expect a desktop computer to do, from browsing the internet and playing high-definition video, to making spreadsheets, word-processing, and playing games. Here we are going to do interface with buzzer with Raspberry pi .Whenever pressing the push button, Buzzer will give sound.

Hardware Required:

- 1 .Raspberry Pi board.
- 2. Tenet Buzzer breakout board.
- 3. Tenet Pushbutton breakout board.
- 4. Hookup wires.

Buzzer:

A buzzer or beeper is an audio signaling device, it may be mechanical, electromechanical, or piezoelectric. Typical uses of buzzers and beepers include alarm devices, timers and confirmation of user input such as a mouse click or keystroke. While technological advancements have caused buzzers to be impractical and undesirable, there are still instances in which buzzers and similar circuits may be used.



Figure-Buzzer

Coding in Raspberry Pi:

Step 1: Raspberry pi home screen like this. Open LXTERMINAL which is available on left corner of the screen.

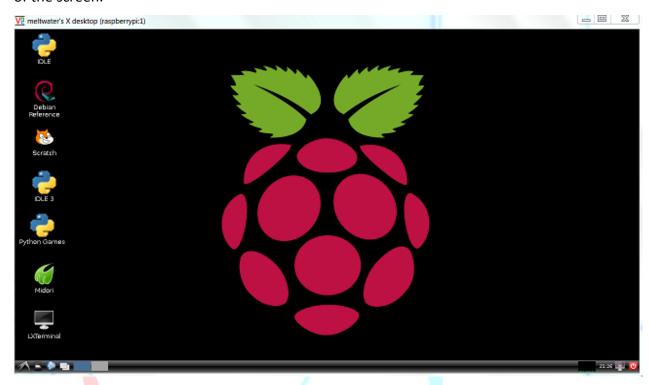


Figure 1

Step 2: Create a new file by using sudo nano filename.py command.

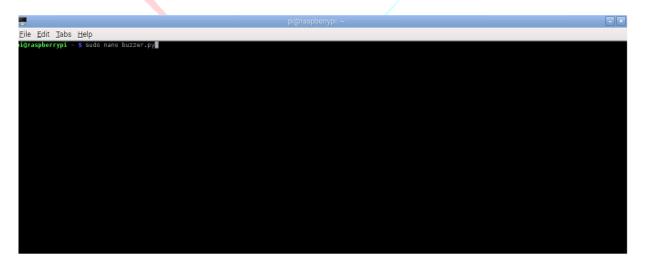


Figure2

Step 3: Hitting ENTER key will take you in the new window where you can type your code.

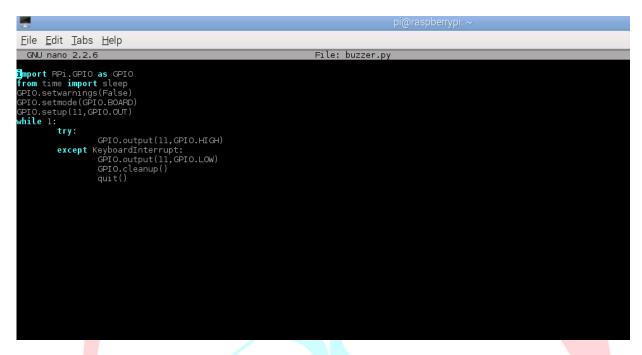


Figure 3

Step 4: After entering your code press the CTRLX to save your code. And it will prompt you that save mod at the bottom of the window. Press Y and hit enter key



Figure4

Step 5: Run the code by using sudo python filename.py command. Hit enter key.On hitting ENTER key, your program will start to run and find the window as given below. And the cursor blinking in the below of your command.

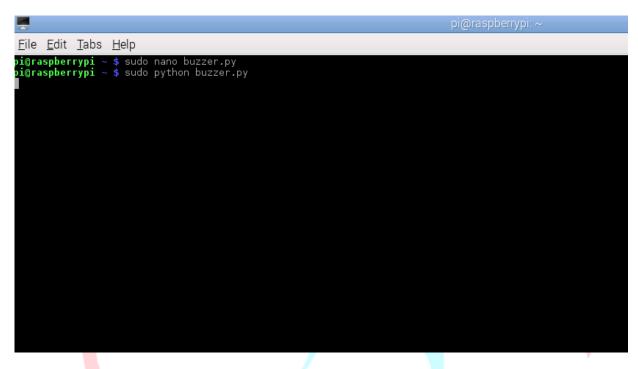
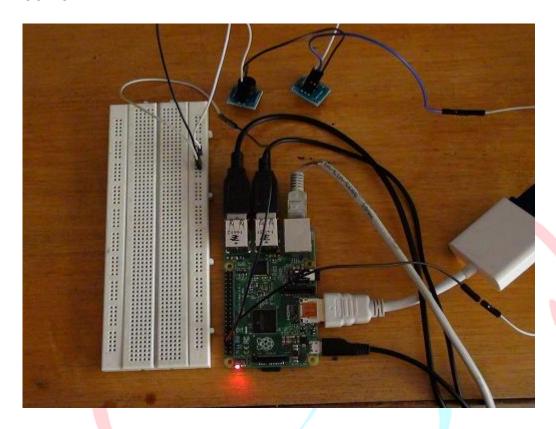


Figure5

Coding:

```
// Import GPIO library file
Import RPi.GPIO as GPIO
From time import sleep
                                       // Import delay library file
GPIO.setwarnings(False)
                                       // This will hide your warnings when you executing code
GPIO.setmode(GPIO.BOARD)
                                       // Setting GPIO configuration . You can also use BCM(Pin differ)
GPIO.setup(11,GPIO.OUT)
                                       // Setting GPIO 11<sup>th</sup> pin as output pin
While 1:
        try:
                GPIO.output(11,GPIO.OUT) // enabling 11<sup>th</sup> pin to high
        Except KeyboardInterrupt:
                                               // Code terminated when entering CTRL+C button
                GPIO.output(11,GPIO.LOW)
                GPIO.cleanup()
                quit()
```

OUTPUT:



For product link:

- 1. http://tenettech.com/product/7021/raspberry-pi-2-model-b-basic-kit-tt-sp-19022015
- 2. http://www.tenettech.com/product/6068/power-supply-breakout-board.
- 3. http://www.tenettech.com/product/5384/piezo-buzzer

For more information please visit: www.tenettech.com

For technical query please send an e-mail: info@tenettech.com