

Assignment : 11

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TE - 19 A

Aim Create a simple web interface for Raspberry-Pi/Beagle board to control the connected LED's remotely through the interface

Theory

- ① WiringPi
- wiringPi is a Pin based GPIO access library written in C for the BCM used in the Raspberry Pi. It's released under the GNU LGPL V3 license and is usable from C, C++ and RTB (BASIC) as well as many other lang with suitable wrappers
- ② Install wiringPi
- wiringPi is not included with Raspbian so to begin you'll need to download and install it
- That means your Pi will need a connection to the internet - either via Ethernet or Wifi.
- We can do using git to download the latest version.
- As long as you have git installed these commands should be all you need to download and install wiringPi.

```
pi@raspberrypi ~$ git clone git://git.drogon.net/wiringpi
pi@raspberrypi ~$ cd wiringpi
pi@raspberrypi ~$ ./wiringpi
pi@raspberrypi ~$ ./wiringpi $ ./build
```

③ GPIO Command Line utility

Task: Connect the LED GND to short Pin GPIO to Long Pin.

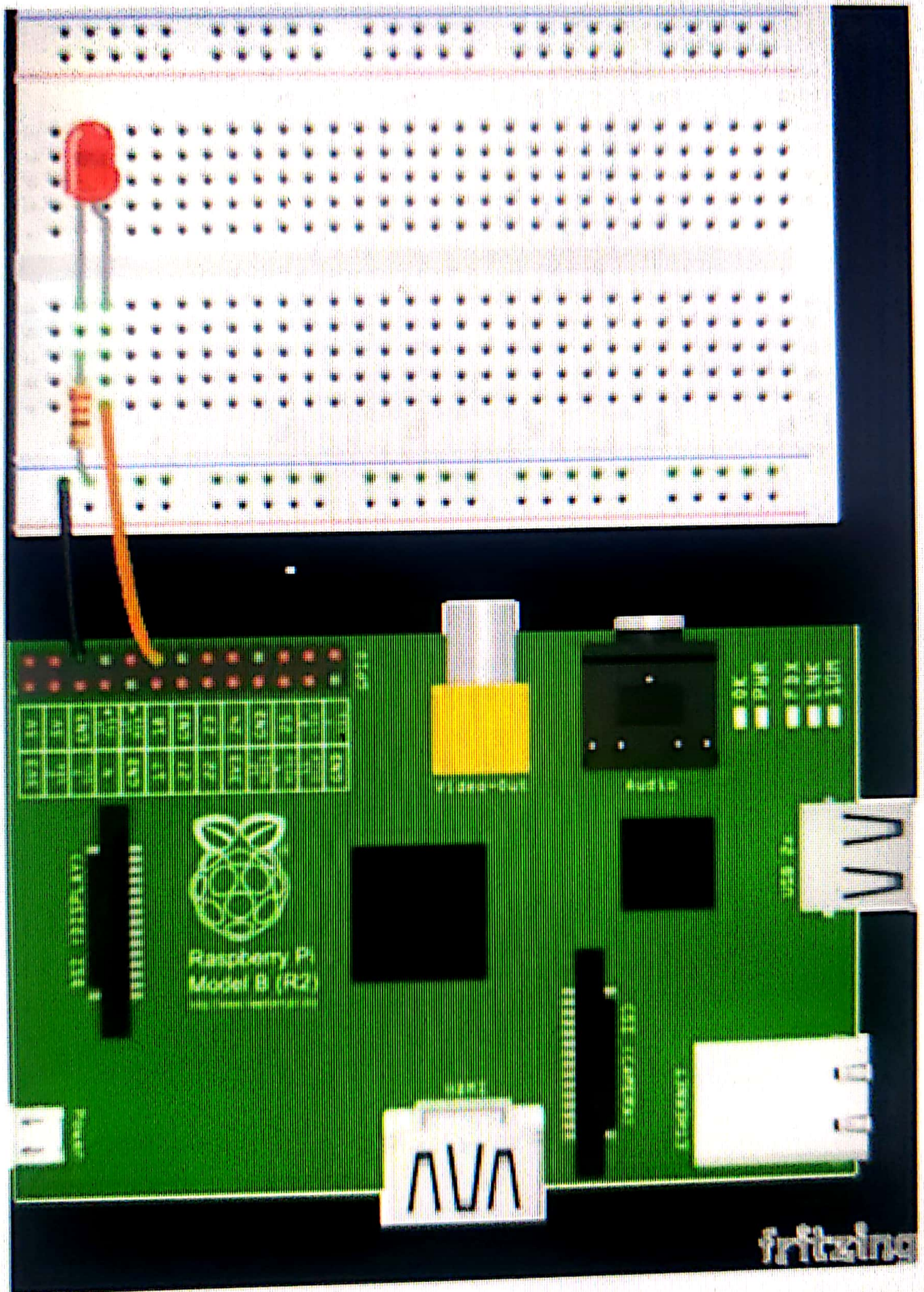
Remember: GPIO is Pin 1 in Wiring Pi
GPIO Command Line utility

① Glow the LED by val
gpio write 1 1

② Off the LED by
gpio write 1 0

③ Web Interface to LED

1. Create the front pg using HTML which contains two buttons to put the LED in on or OFF state
2. Control the data i/p from button using PHP pg



Conclusion

Thus we have created simple web interface for Raspberry -Pi/ Beagle board to control the connected LEDs remotely through the interface.