Experiment no :- 11

Aim :- Create a simple web interface for Raspberry-Pi / Beagle board to control the connected LEDs remotely through interface.

Theory :-

WiringPi :-

WiringPi is a PIN based GPIO access library written in C for BCM2835 used in Raspberry Pi. It is released under GNU LGPL V3 License and is usable from C, C++ and RTB (BASIC) as well as many other lang. with suitable wrappers.

Install WiringPi :-

WiringPi is not included with Raspbian, so to begin, you will need to download and install it. That means your Pi will need a connection to internet

```
Pi @ raspberrypi ~ $ git clone git://git.drogon.net/wiringPi
pi @ raspberrypi ~ $ cd wiringPi
```

GPIO Command Line utility :-

Task: Connect LED GND to short Pin GPIO18 to Long Pin

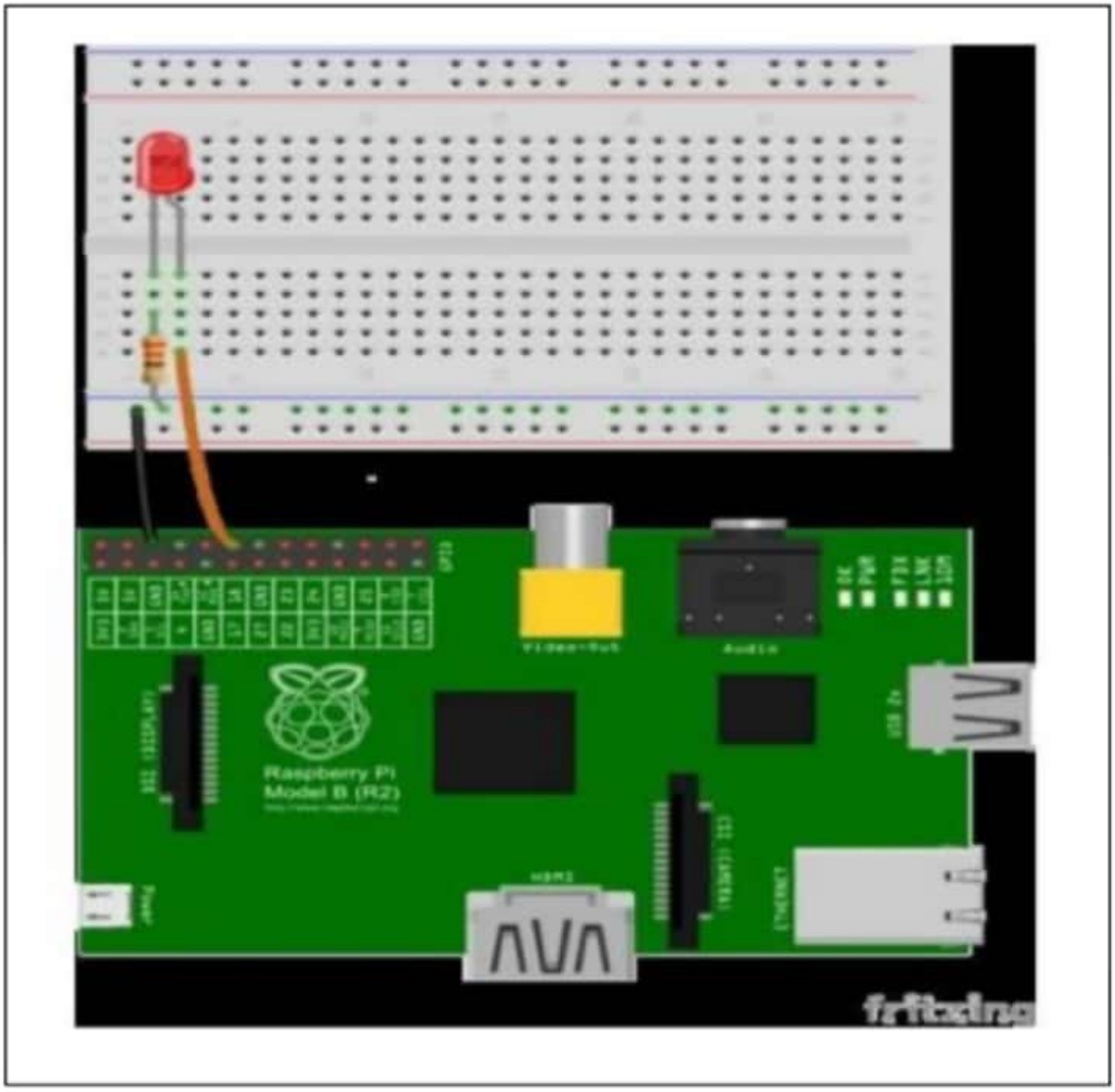
Remember: GPIO18 is PIN1 in ~~WiringPI~~ wiring PI

1. Glow the LED by value

   gpio write 1 1

2. off LED by

   gpio write 1 0



web interface to LED

1. Create front page using HTML which contains two buttons to put LED in ON or OFF state
2. Control data input from buttons using PHP page.

Conclusion :-

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