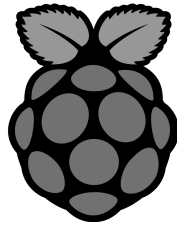
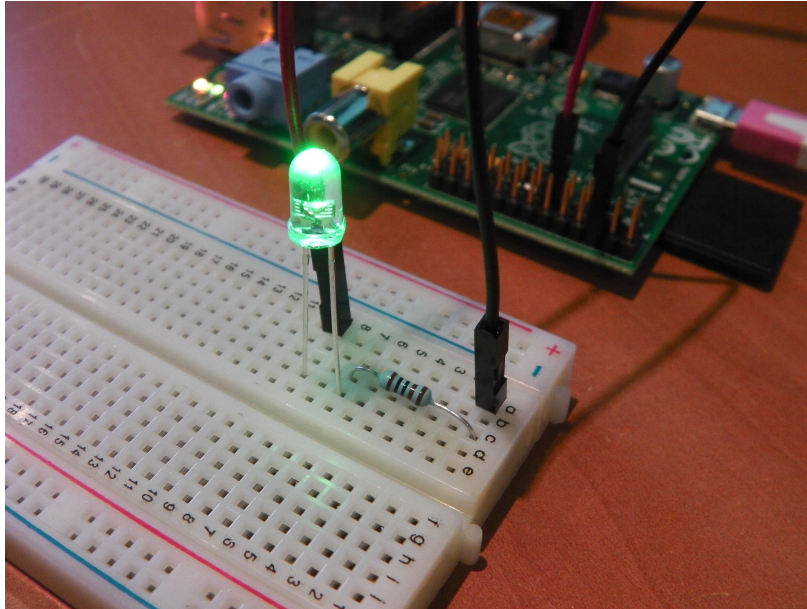


**INCHICODE**  
**WEEK 4**





## INCHICODE WEEK 4

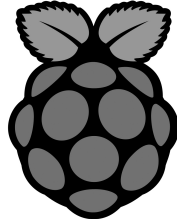


### RASPBERRY PI AND ELECTRONICS

Today we are going to learn how to control the outside world with our Raspberry Pi and also how to connect to the PI from a laptop computer.

#### Things we will learn

- What is VNC Viewer
- Where do I download it?
- What do I need to know?
- How to wire up the GPIO pins?
- How do I set up the leds on the board ?



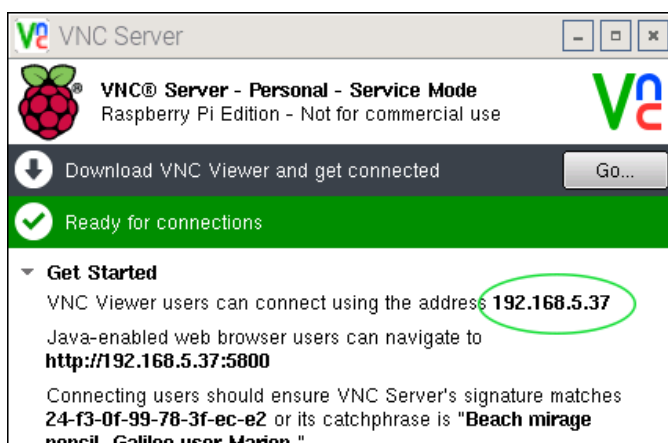
## INCHICODE WEEK 4

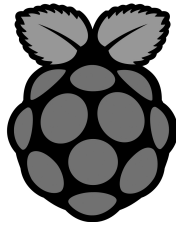
### RASPBERRY PI AND VNC VIEWER

#### VNC VIEWER

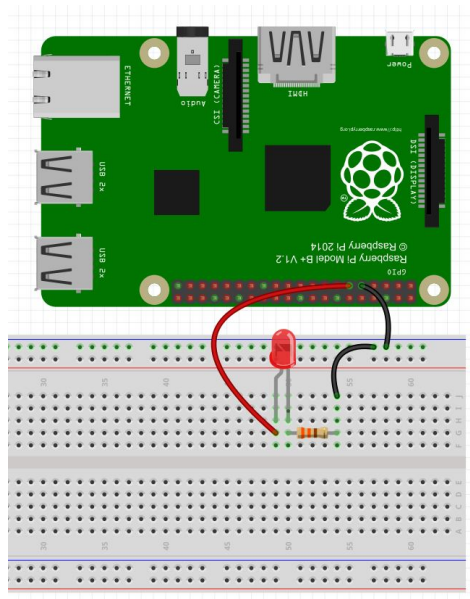
#### Connecting to the PI remotely

1. Head to <https://www.realvnc.com/download/viewer/> and download the file for your PC/MAC.
2. Install the viewer following the instructions carefully.
3. When VNC Viewer is installed plug in your Raspberry pi to a HDMI TV or PC
4. Go to VNC SERVER and get IP ADDRESS and also add password to USER A/C
5. Go to VNC VIEWER and start a new connection
6. Put in new ip address and add user and password
7. Start Raspberry Pi on laptop
8. ENJOY!





## INCHICODE WEEK 4



### GETTING AN LED TO LIGHT

Connect the led to the board and PI

1. Put resistor and led on the board as shown
2. Connect wires to the board.
3. Connect wires to the pins on the PI
4. Open Terminal Window and type in the code below

```
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BOARD)
GPIO.setup(11,GPIO.OUT)
GPIO.output(11,True)
```

```
GPIO.output(11,True) // This turns on LED
```

```
GPIO.output(11,False) // This turns off LED
```