**IoT Experiment -- 2**

**Task:**

Modify the program of experiment-2 (in the manual) such that **when we press “ON” button in our smart-phone**, **the LED (bulb) will act like an indicator (of the vehicle). First, the LED must turn ON for one second, then it must turn OFF for next one second and this will go on** **until we press the “OFF” button in our smart-phone.**

**SOLUTION:**

import bluetooth

import time

import RPi.GPIO as GPIO

LED=38

GPIO.setmode(GPIO.BOARD)

GPIO.setwarnings(False)

GPIO.setup(LED,GPIO.OUT)

GPIO.output(LED,0)

server\_socket = bluetooth.BluetoothSocket( bluetooth.RFCOMM )

port=3

server\_socket.bind((“”,port))

server\_socket.listen(3)

client\_socket,address = server\_socket.accept()

print “Accepted connection from “, address

while 1:

data = client\_socket.recv(1)

print “Recieved: %c”%data

if(data == "@"): # OFF signal from android phone

print("GPIO 38 LOW,LED OFF")

GPIO.output(LED,0)

if(data == "#"): # ON signal from android phone

print("GPIO is BLINKING")

control = True

while control:

print("GPIO 38 HIGH,LED ON")

GPIO.output(LED,1)

time.sleep(1)

print("GPIO 38 LOW,LED OFF")

GPIO.output(LED,0)

time.sleep(1)

data = client\_socket.recv(1)

if(data == "@"):

print("LED INDICATOR OFF");

control = False

client\_socket.close()

server\_socket.close()

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