

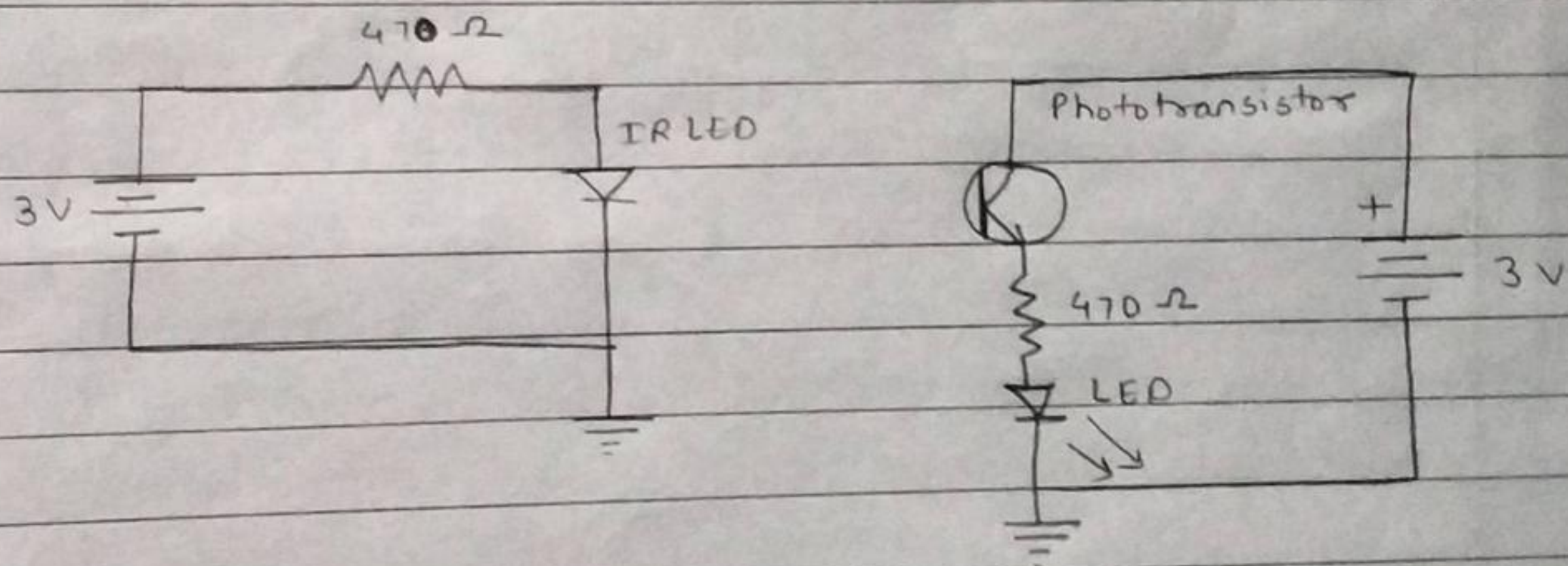
IoT Exp - 3.

Aim :- To study IR sensor & it's application to detect obstacle & notify user using LED.

Requirement :- Implement a program to understand the concept of IR sensors.

Theory :-

An infrared sensor (IR) is an electronic instrument which is used to sense certain characteristics of its surroundings by either emitting & / or detecting infrared radiation. And they are also capable of sensing the heat & detecting motion. IR (INFRARED) sensor is based on LM 358 IC which is an operational amplifier acting as a comparator.

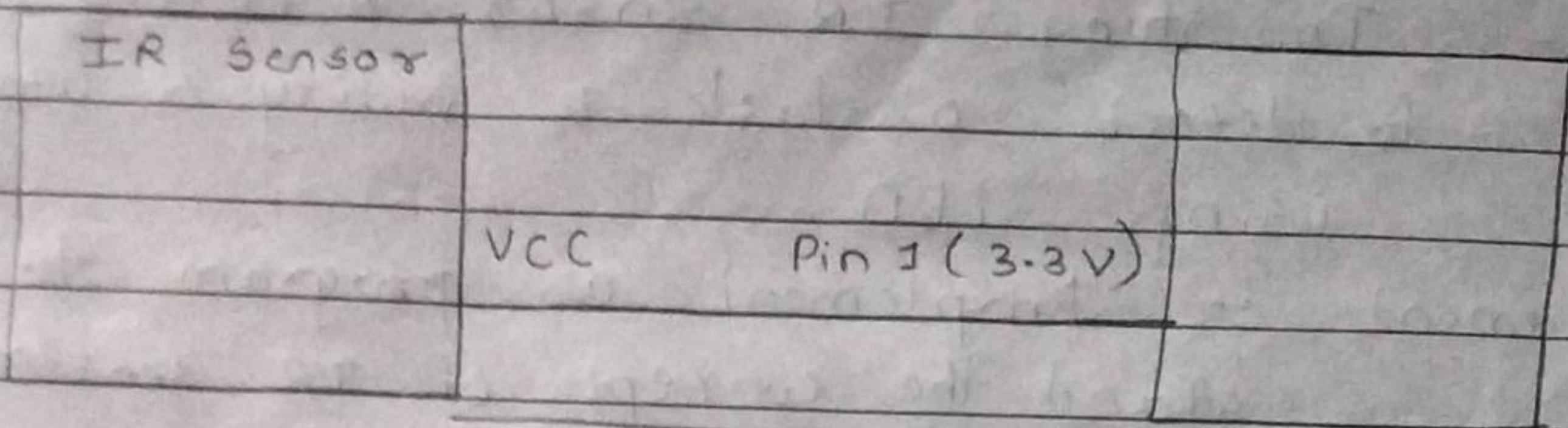


Steps to perform Experiment:-

- Connect IR sensor to Raspberry Pi as follows,
 - IR interfacing with RPi.

(i) Connect the two LED's with resistors to RPi using GPIO pins & ground pins.

(ii) Make green led on which notifies no obstacle detected while red is off.



GND

Pin 6 (Ground)

O/P

Pin 3 (GPIO)

RPI

Conclusion :- Thus we have studied interfacing of IR sensor with Raspberry Pi board and usage of IR sensor for detecting obstacles.