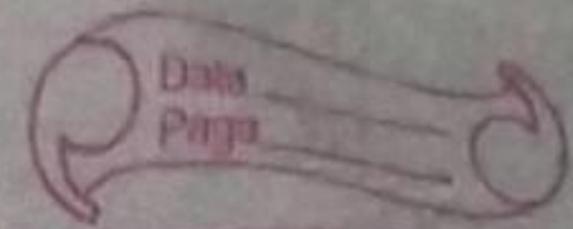


TOT Exp - 3.



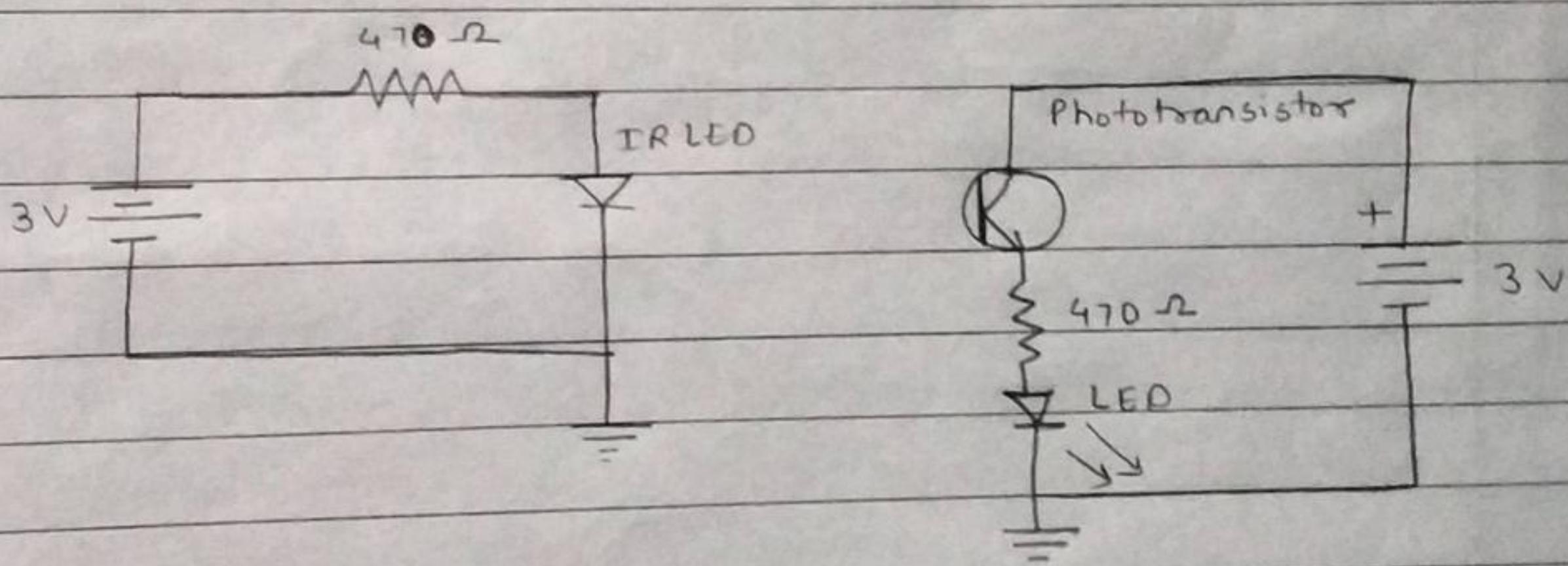
Aim :- To study IR sensor & it's application to detect obstacle & notify user using LED.

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 infra-red 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.
- (ii) Connect the two LED's with resistors to RPi using GPP0 pins & ground pins.
- (iii) Make green led on which notifies no obstacle detected while red is off.

IR Sensor

VCC

Pin 1 (3.3v)

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.