TE A
17

Assignment No : 4

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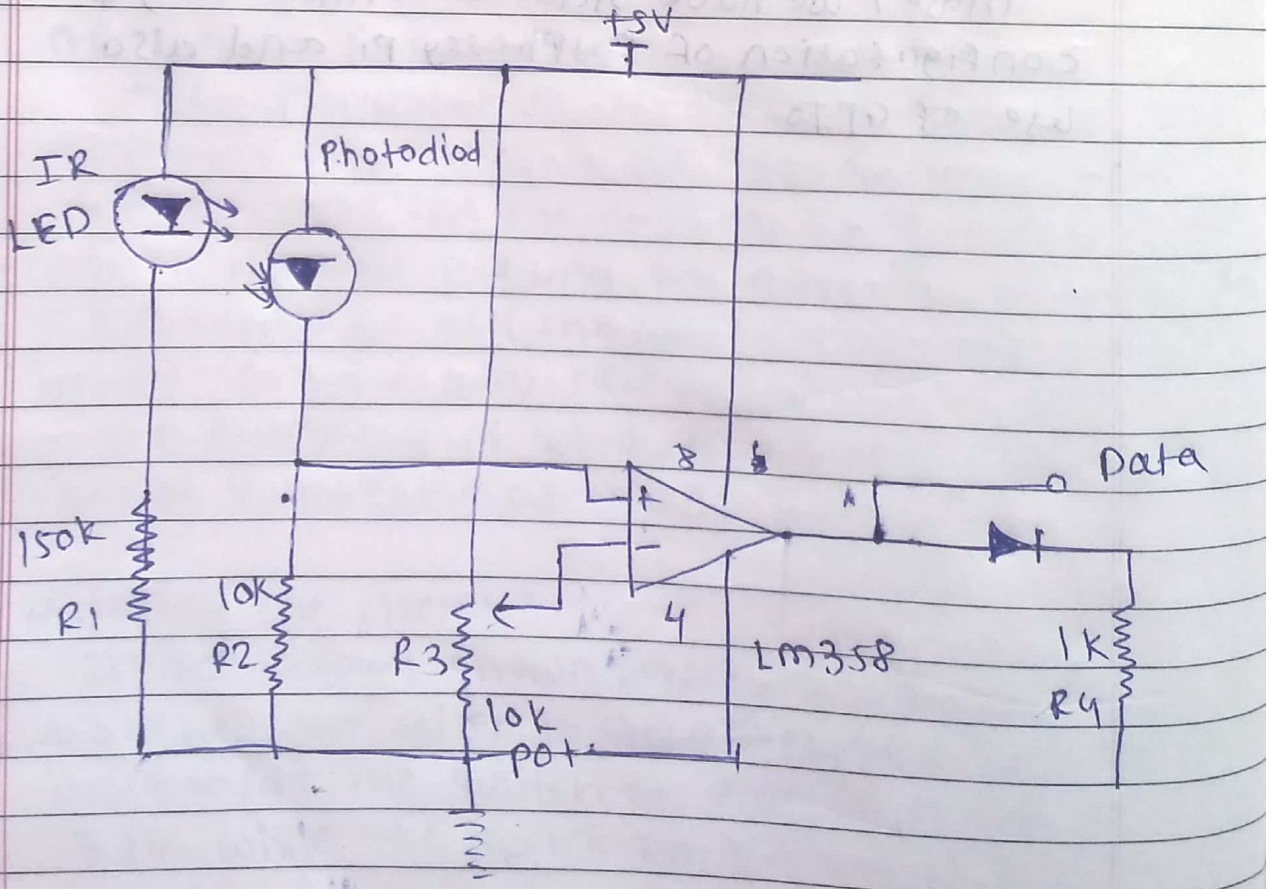
GURUKUL | Page No. | Date

Aim : Understanding the connectivity of Raspberry Pi Begle board circuit with IP sensor write on application to detect obstacle & notify user using LED's

Theory

1. Emitter : This component continuosly emits the signal.
2. Receiver : It writes for the signal which is bounced back obstacle.
3. Output : Could be used as I/P for further processing of the signal
4. Ground :- Ground / negative point of the circuit
5. Voltage : I/P 3.3 V

(5) ~~obj~~ Circuit diagram :



GURUKUL | Page No.
Date / /

(2) circuit : to detect obstacles

Part 1 : Connecting IR sensor

1) IR 3. connect GPIO 17 from the Raspberry Pi to breadboard
2) connect out pin of sensor with the Breadboard
3) connect GND with -ve line on left side of breadb.
4) connect GND of IR sensor to Breadboard
5) connect GND from step 3 to Breadboard
6) connect eVCC of the IR sensor to breadboard
7) connect 3V3 (Pin# 1) to +ve line one left side of the breadboard
8) connect 3V3 to breadboard

Part 2 :- Connecting LED

1) connect GPIO 4 follow the board to the breadboard
2) connect +ve point of LED to breadboard
3) connect -ve point of LED to breadboard

Part 3 :- Executing the code

1) Open terminal
2) navigate to directory where the above code is save
3) Type $ python3 is obstacle.py & press enter

Conclusion:

Thus we done Connectivity of Raspberry Pi / Begle Board circuit with IR sensor. write on application to detect obstacle & utility. user using LEDs

IR Sensor Fig.1