IOT Exp - 4

Title :- Demonstrate Raspberry - Pi connectivity with FIRE sensor. Write an app^{n} to detect Fire & notify users using LED's.

Aim :- Experiment based on FIRE sensor. Write an application to detect obstacle & notify user. using LED.

Theory : The Fire sensor, as the name suggests, is used as a simple & compact device for protection against fire. The module makes use of IR sensor & comparator to detect fire up to a range of 1-2 meters depending on fire density. The fire sensor circuit is too sensitive & can detect a rise in temperature in it's vicinity.

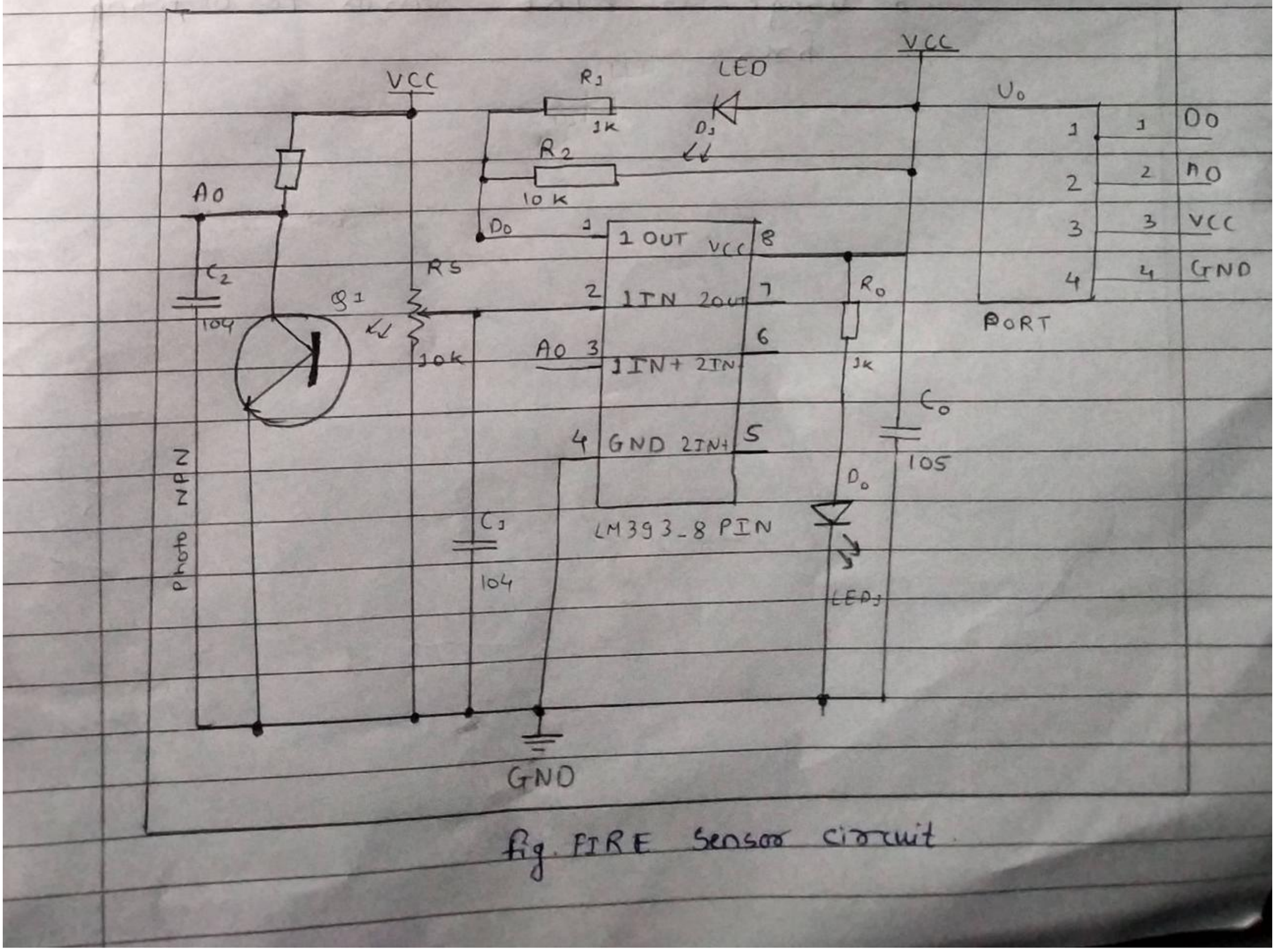

fig. FIRE Sensor circuit

Steps to perform Experiment :

- Connect FIRE sensor to Raspberry Pi as follows,
  - fire interfacing with Rpi

(ii) Connect the two LED's with resistors (Green & Red colour) to RPi using GPIO pins & ground pins.

(iii) Make green led on which notifies no obstacle detected while red is off. If obstacle detected then you should turn on red led & make green led off.

Conclusion :- Thus we have studied interfacing of FIRE sensor with Raspberry pi board & usage of FIRE sensor for detecting fire.