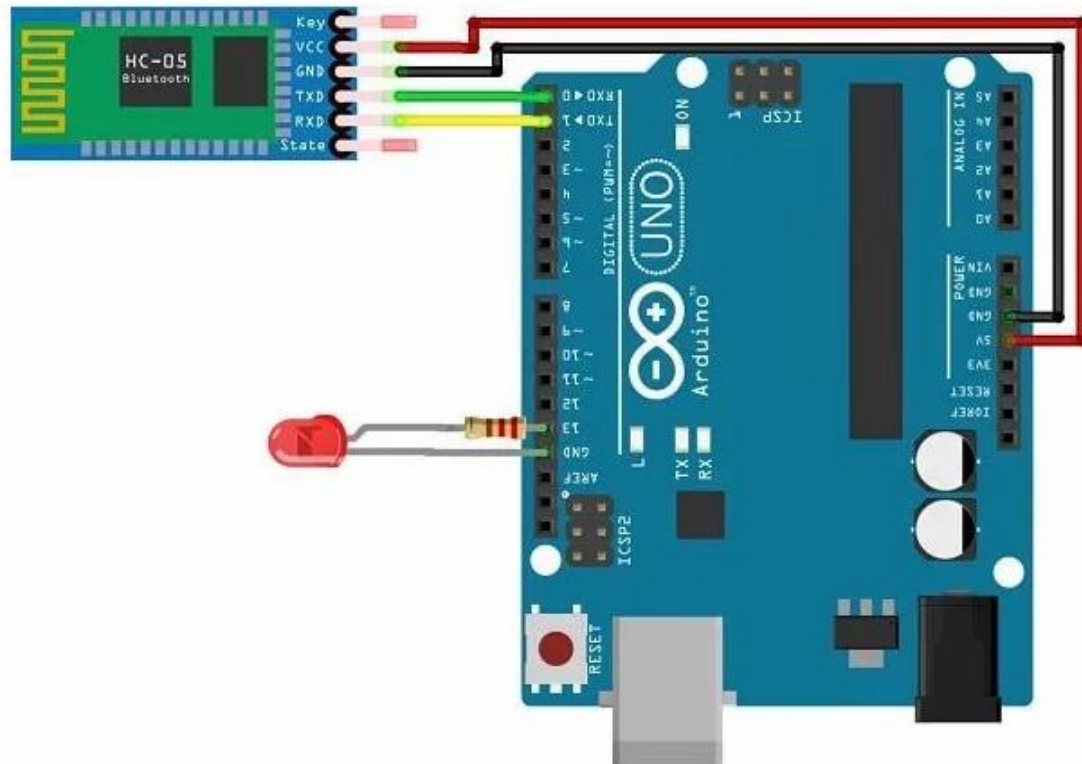# EXPERIMENT :5 Bluetooth Interface-phone controlled light system

DIAGRAM:-

THEORY:

CONCEPT USED-

1)I used concept of how to use P-N junction diode and bluetooth.

2) How resistance is used in a circuit.

3) Logic code for Arduino UNO, using Loop statement.

4) How to work with Breadboard.

LEARNING AND OBSERVATIONS-

1)I learnt to use Arduino Board and how to code it for bluetooth.

2)Arduino board has Digital pins and Analog pins.

Digital pin provides Input as well as Output, but Analog pin provides input only.

3)The Arduino board has ~ sign in Digital pin side which is also known as Pulse Width Modulation(PWM).

These pins help's in getting analog results with digital means.

4)How to work with circuits on breadboard.

5)Since the LED can bear a limited supply of voltage so we have used resistance in series

It can not work with 5V.

6. Digital Pin provides 5V Power supply to the circuit.

PROBLEMS AND TROUBLESHOOTING –

➔ While during connections it is important to do all connection in a sequence manner otherwise for loop will not be used while during program.

PRECAUTIONS -

➔ Wiring should be done properly, neatly.
➔ Do not use excess wires try to reduce number of wires used.

LEARNING OUTCOMES –

We learn to code and how to make circuit using ardiuno.