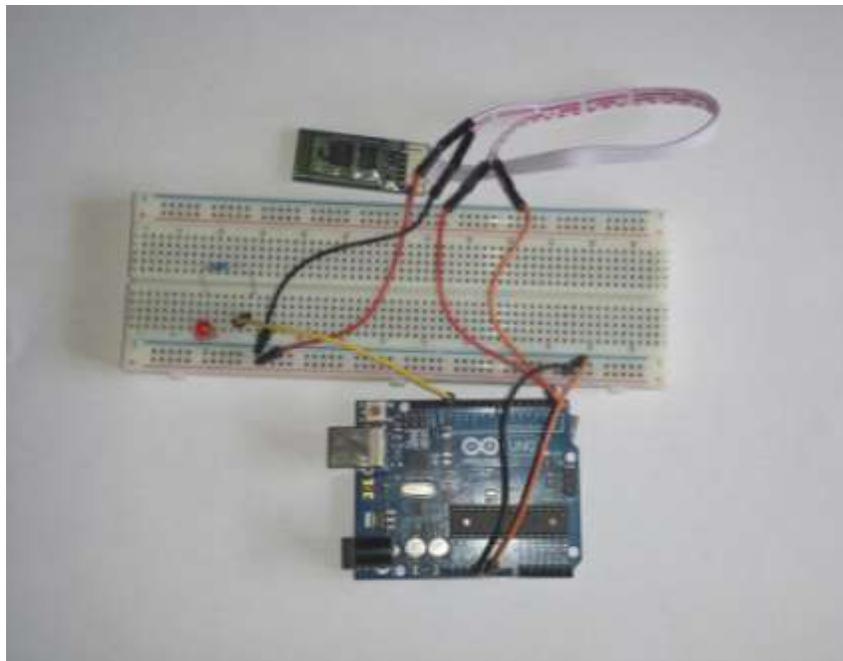


Bluetooth Controlled LED Light

Components

1. Arduino Uno Board
2. BreadBoard
3. Bluetooth Module
4. LED Light with a 220 or 330 ohms Resistor
5. Jumper wires

SETTING UP:



STEPS:

1. Connect two jumper wires from the 5V Pin and GND Pin on the Arduino to the Positive and negative rail of the BreadBoard.
2. Connect the Bluetooth Vcc wire and GND wire to the Positive and Negative rails on the BreadBoard
3. Connect the Bluetooth TXD wire to RX Pin on the Arduino
4. Connect the Bluetooth RXD wire to TX Pin on the Arduino
5. Insert the LED negative leg into the negative rail of the BreadBoard and positive leg anywhere on the board.
6. Insert one leg of the Resistor in-line with the positive leg of the LED and the other leg anywhere on the board (but not in-line with the other Resistor's leg)

7. Connect a jumper wire from the Resistor to Pin 13 on the Arduino.
8. Upload the Code written below onto your Arduino
9. Download Arduino Bluetooth for LEDs App onto your Cellphone. I used EKALAVYA PRODUCTS App that I found online.

If the wiring is right and the Code is correct, you should be able to turn your LED Light ON and OFF using your Smartphone.

CODE:

Bluetooth Controlled LED Light

```
char data = 0;          //Variable for storing received data

void setup()
{
  Serial.begin(9600);   //Sets the data rate in bits per second (baud) for serial data transmission
  pinMode(13, OUTPUT); //Sets digital pin 13 as output pin
}

void loop()
{
  if(Serial.available() > 0) // Send data only when you receive data:
  {
    data = Serial.read(); //Read the incoming data and store it into variable data
    Serial.print(data);   //Print Value inside data in Serial monitor
    Serial.print("\n");  //New line
    if(data == '1')      //Checks whether value of data is equal to 1
      digitalWrite(13, HIGH); //If value is 1 then LED turns ON
    else if(data == '0') //Checks whether value of data is equal to 0
      digitalWrite(13, LOW); //If value is 0 then LED turns OFF
  }
}
```