

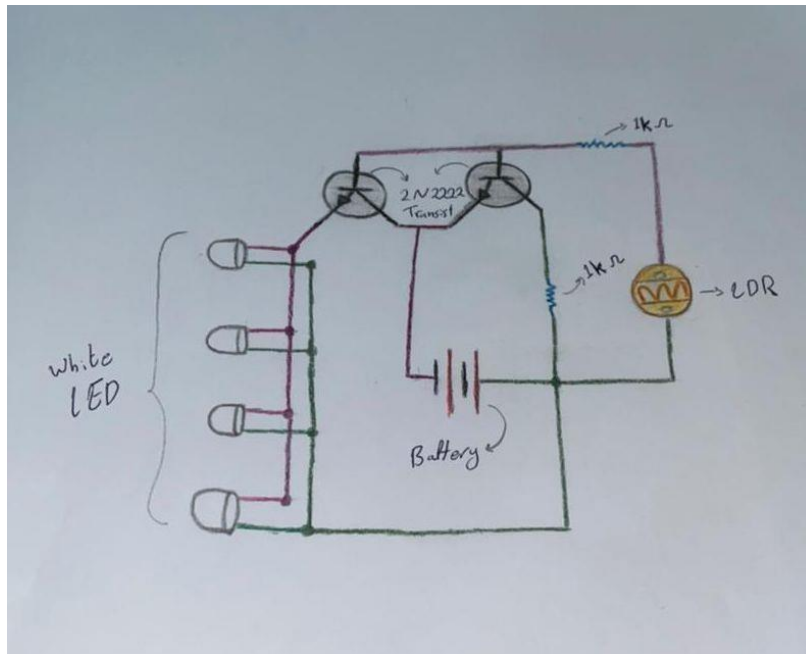
“ Automatic Street Light Control”

Introduction:

Starting from 18th century with Edison experiments until he invented the light. Light has been developed for centuries and the science also for that we are here in 2021 having sensitive lights some of them to light, move and heat today most of the street light are automatic lights work during the nights, closes during presence of the sunlight. In this project I'm given mini model about how the street light work automatically.

Description of circuit:

Circuit Diagram:



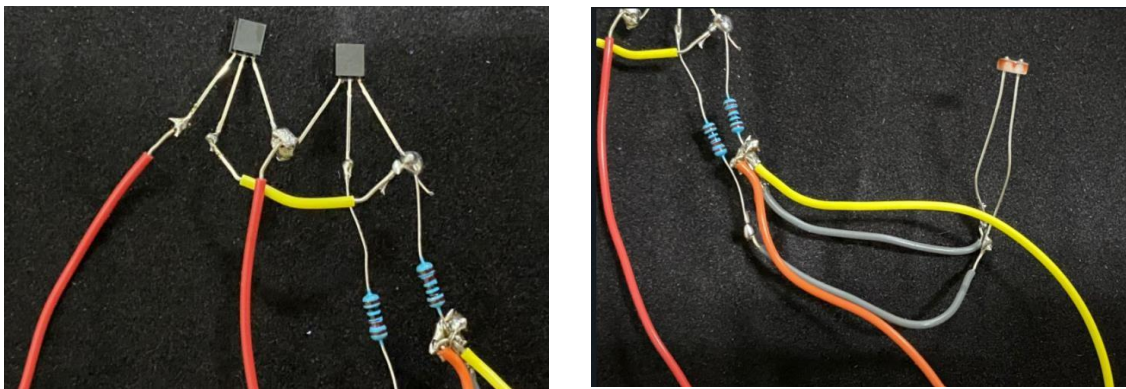
Connect of the circuit:

- Components Connected:
Led connected in series.




- Flowing of the current:





Electrons will flow from the negative terminal to transistor in “Collector – Emitter ” and the positive terminal is connected to “ Collector ” while the Base & Collector are connected with 1k resistor, at the end we connect the LDR. On the other hand, we connected the negative terminal of the led with Emitter of transistor and the positive with the LDR terminal. Farther more to get the best result we will connect a wire from Base in the first transistor to Collector in the second one.

Circuit:



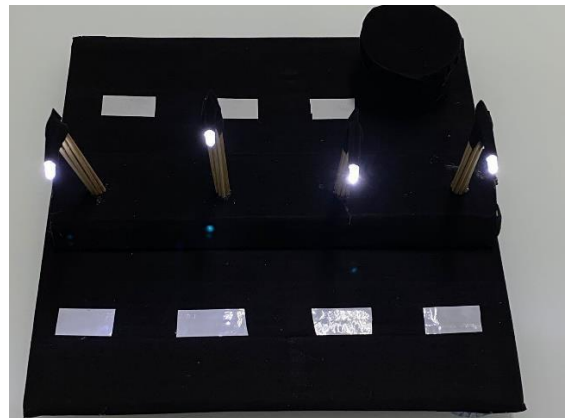
Components:

Component	Pieces	Picture
Transistor – 2N222 npn	2	
Resistor – 1k	2	
Battery Connector	1	

Battery – 9v	1	
LDR	1	
Wires		
White Led	4	

Results:

- The main idea “if there is no light the circuit will work”
- The LDR is sensitive to light so if the light is switching on the led won't work and if the light is switching off the led will turn on and light up.



Discussion and comments:

- The project work as supposed to be and give us the result we are looking for.

Problems:

- The LDR wire is too sensitive so I have to reconnect the wire so many times.
- Also, I faced some problem with the led in the beginning while I connect one led with the other it works but when I connected the third, I lose the first one.

References:

- [How to make Automatic Street light \(DIY\) - YouTube](#)
- Electronic Devices and Circuit Theory, 11th edition - 2013, Pearson