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Automatic street light control system

**Automatic Street Light Control System**

**ABSTRACT:**

Here is a description about  **Automatic Street Light Control System**or **Dark Sensor.**

It is a simple and powerful concept , which uses transistor ( **BC 547** NPN) as a switch to switch ON and OFF the street light system automatically .  
It automatically switches **ON** lights when the sunlight goes below the visible region of our eyes.

( e.g in evening after Sunset ) it automatically switches **OFF** lights when Sunlight fall on it ( e.g in morning ) , by using a sensor called LDR (Light Dependent Resistor) which senses the light just like our eyes.  
**Needs no manual operation for switching ON and OFF..**

**CIRCUIT COMPONENTS:**

Following are the components

**COMPONENTS QUANTITY**

* Resistors 4.7k , 47k , 470 3
* IC N555 1
* Light emitting diode(LED)-Any colour 1
* Connecting wires
* Power supply-6V or 9V
* Capacitors 1u , 100u 2

**CIRCUIT DIAGRAM:**

The circuit diagram will give a better understanding of our project

**CONSTRUCTION:**

The transistors Q1 and Q2 respectively are connected on the breadboard appropriately.Put wires across emitter pin of both transistors and -ve terminal of battery(lowest/ bottom row of breadboard.)Put a wire across Collector pin of transistor Q1 and Base pin of transistor Q2. Insert Light dependent resistor(LDR) across positive terminal of battery(topmost row of breadboard) and base terminal of transistor Q1. **Put a resistor- 330 Ohm across base pin of transistor Q1 and negative terminal of battery(lowest bottom row of breadboard). Put a resistor 330R across positive terminal of battery(topmost row of breadboard)and anode terminal of LED(Light emitting diode) & Connect the cathode terminal of LED to capacitors Q2.** **The circuit is ready for testing. Connect battery terminals and see the output. As you block light falling on LDR(Light dependent resistor), the LED glows.**