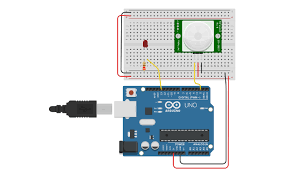
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**SUBJECT-BEEE LAB**

AIM:DESIGN A SYSTEM THAT AUTOMATICALLY TURNS ON THE LIGHT INSIDE ALMIRAH WHENEVER IT IS OPENED AND TURNS OFF THE LIGHT AFTER 100MS IF THERE IS ENOUGH LIGHT IN ROOM

**CIRCUIT DIAGRAM:**

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**THEORY:**

Arduino is an open-source electronics platform based on easy-to-use hardware and software. Arduino boards are able to read inputs - light on a sensor, a finger on a button.

For this project, the main component we will use is a PIRSENSOR . A passive infrared sensor (**PIR sensor**) is an electronic sensor that measures infrared (IR) light radiating from objects in its field of view. They are most often used in PIR-based motion detectors. PIR sensors are commonly used in security alarms and automatic lighting applications.

How PIRs **Work**? The **PIR sensor** itself has two slots in it, each slot is made of a special material that is sensitive to IR. ... When a warm body like a human or animal passes by, it first intercepts one half of the **PIR sensor**, which causes a positive differential change between the two halves.

**LEARNING AND OBSERVATIONS:**

1. How led glow with using code?
2. How can pir sensor works?

**PROBLEM AND TROUBLESHOOTING:**

1) Setting up a connection.

2) Errors in code.

3) Port was not selected.

4) Internet network poor.

**PRECAUTIONS:**

1. Don’t plug in a LED without a current limiting resistor.
2. Circuit should be properly set into breadboard.
3. Don’t supply high voltage.

**LEARNING OUTCOMES:**

1. Came to know about Arduino.
2. Came to know about how to design a circuit and Glow LED
3. When you open almirah when ever is opened and turn off after 100ms.