AIM:

- Designing a system that automatically turns on the light inside an almirah whenever it is opened and turns it off in 100 ms if there is enough light in the room.

Materials Required:

- LEDs
- Arduino UNO
- Power Supply
- Wires
- Photo Sensor

Working:

- When the almirah is closed, the switch is on which short circuits the whole thing. As soon as the almirah is opened, the switch is closed and the current flows through the Arduino, the code starts to run

- The threshold value is set to 100 by practical observation.

- CODE:

```
int sensorValue = 0, i=0;
void setup()
{
pinMode(2, OUTPUT);
Serial.begin(9600);
}
void loop()
{
sensorValue = analogRead(A0);
Serial.println(sensorValue);
delay(100);
if ( sensorValue < 100)
{
digitalWrite(2, HIGH);
i = 0;
}
else if(sensorValue > 100)
{
while(i==0){
digitalWrite(2, HIGH);
delay(100);
digitalWrite(2,LOW);
i++;
}
}
else
{
digitalWrite(2,LOW);
}
//digitalWrite(2,LOW);
}
```