**AUDITORIUM DOOR OPENING AND ILLUMINATION LIGHTING SYSTEM**

**AIM:**

The main aim of the project is to provide security with automatic door open and close system and controlling the room lighting.

**PURPOSE:**

The purpose of the project is to develop a system using ldr sensor to detect the room light intensity and IR sensors to know the person presence.

**CONTROL SECTION:**

**MICRO CONTROLLER**

**AT89S52**

**POWER SUPPLY**

**LCD DISPLAY**

**(16 X 2 LINES)**

**LDR**

**BULB**

 **IR ENTRY**

**RELAY**

**IR EXIT**

**DOOR MOTOR**

**MOTOR DRIVER**

**DOOR**

**(MOTOR)**

**DOOR**

**(MOTOR)**

**power supply:**

**STEP DOWN**

**TRANSFORMER**

**BRIDGE**

**RECTIFIER**

**FILTER**

**CIRCUIT**

**REGULATOR SECTION**

**DESCRIPTION:**

In our project IR sensors are used to count the number of persons entering into the room and it will be displayed on the LCD and provides the delay to the DOOR to open for some time. The ldr sensor is to detect the room light intensity based on that the room lighting system the room lightening device will get into active mode. If the number persons in the room becomes zero then the lightening system will gets into auto off state.

 **HARDWARE COMPONENTS:**

1. Microcontroller (AT89S52)
2. LCD Display (16x2 lines)
3. Door system
4. LDR sensor
5. IR SENSORS
6. Relay
7. Bulb
8. Power supply

**SOFTWARE:**

1. Kiel U vision
2. Express PCB
3. ISP

**RESULT:**

By using this we can implement a system to provide security to the room with automatic door open and close system.