**To Develop Ladder Logic Diagram of Automatic Door Open Close System**

**Objectives:**

* When someone enters the infrared sensing field, opening motor starts working to open the door automatically till the door touches the opening limit switch
* If the door touches the opening limit switch for 7 sec and nobody enters the sensing field, the closing motor starts working to close the door automatically till the closing limit switch touched together.
* Stop the closing action immediately if someone enters the sensing field during the door closing process

**Learning Outcomes:**

* To put to practice the concepts learnt so far.
* To simulate the program and implement in MacroPLC.

**Apparatus:**

 **Procedure:**

* Run the Macro PLC Software.
* Open the file menu.
* Open new project in sub menu.
* Select project name.
* Click symbols to design the required ladder logic.
* Select PLC in main menu.
* Select On-line option.
* Select Run PLC.
* Operate the switches and observe the output.
* Record result in conclusion.

**Attach the screen shots for the above steps:**

**Logic implementation on PLC:**

**Conclusion:**

 ***Date:*** *\_\_\_\ \_\_\_\ 20\_\_\_\_*

***Obtained marks: \_\_\_\_\_ /*** *10*