**Motor driving unit and bidirectional motor control ----**

For the operation of gate door or valve control unit to make it open and close the control signal is generated from the microcontroller. The bidirectional DC motor is used for this purpose which can rotate in clock and anticlockwise direction. To rotate the motor the H bridge controller chip is used L293 which controls the action of motor. The motor controller IC has got 2 inputs for every motor is depending on the logical states at the inputs the DC motor action executes. At the time when gate , door or valve unit to open the controller provide the pair of logical states to the H Bridge IC so the unit opens by sending 1 and 0 logic to IC L293 to its input1 and input2 terminals because of this the motor gets rotate in one direction.

To make it the gate, door or valve to open or to rotate in reverse direction of motor the logic signal generated from controller is 0 and 1 which cause the motor to rotate in reverse direction.

Circuit diagram of bidirectional motor control

