**ULTRASONIC SENSOR**

HARDWARE USED:

* ARDUINO UNO
* 2 UTLTRASONIC sensor
* 2 LEDS

THEORY:

Concept:

An optical sensor has a transmitter and receiver, whereas an ultrasonic sensor uses a single ultrasonic element for both emission and reception. In a reflective model ultrasonic sensor, a single oscillator emits and receives ultrasonic waves alternately. This enables miniaturization of the sensor head.

LEARNING AND OBSERVATIONS

1)I HAVE LEARNT HOW TO USE ARDUINO

2) HOW TO CREATE CIRCUITS ON BREAD BOARD

3) HOW TO USE ULTRA SONIC SENSOR

OBSERVATIONS:

1)ARDUINO CAN PROVIDE 5v OF SUPLLY

2) LIGHTS BLINKS WHEN THE SENSOR CATCHES MOVEMENTS IN ITS RANGE

3)BREADBOARD IS USED TO CREATE CIRCUIT .

PRECAUTION

1)WE NEED TO HANDLE THE ELEMENT CAREFULLY

2)THE CONNECTIONS OF ARDUINO SHOULD BE THOROUGH AND TIGHT

3)INSERTION OF DELAY SHOULD NOT BE FORGOTTEN.

4)IN THE IDE OF ARDUINO INSTRUCTION SHOULD BE GIVEN IN VOID LOOP.

LEARNINGS

1)I HAVE LEARNT TO MAKE CIRCIUTS USING BREAD BOARD

2) I HAVE LEARNT ABOUT SENSOR

3)I HAVE LEARNT HOW TO CONNECT AND USE ARDUINO WITH SENSORS

4)I HAVE LEARNT MAKE OTHER TYPES OF GADGET USING SAME CONCEPT

5)I HAVE LEARNT ABOUT THE ELEMENTS OF ARDUINO BOARD AND ITS FUNCTIONS.