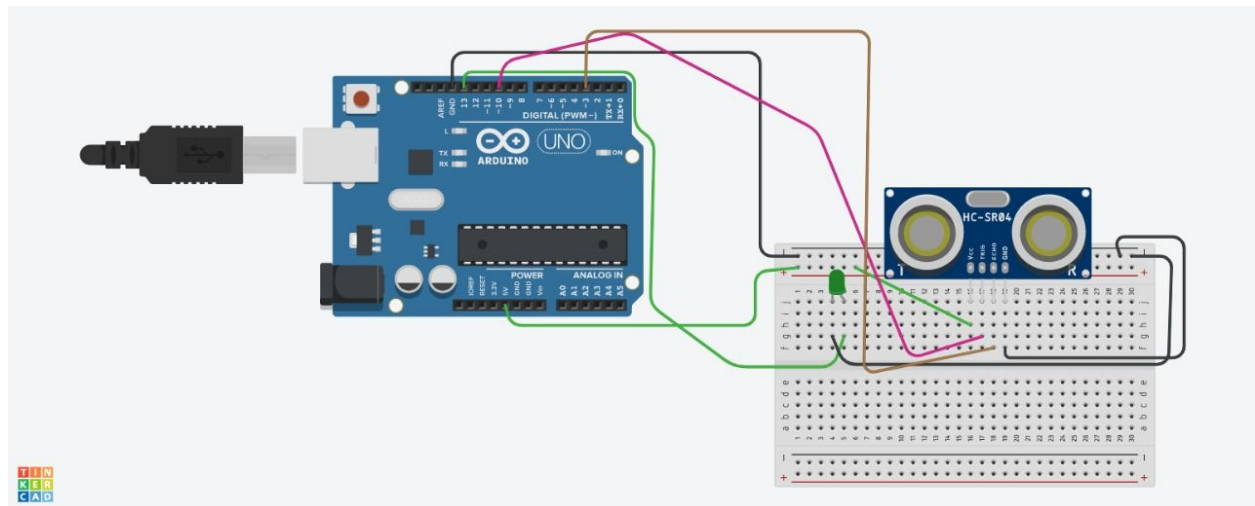# *Circuit Diagram*

theory

Concept used:

Various concepts are used in this exp as listed:

1. Ultra Sonic Sensor. 2. Combination of Ultra sonic sensor with the arduino.3. Obstacle sensing. 4. Basic coding of incrementation and looping.

Learning and Observation:

In this exp we learnt about :

> 1. We learnt about Ultra Sonic Sensor. 2. We learnt about the pulseIn command of Arduino. 3. We learnt about the transmitter and receiver pins of the Ultra Sonic Sensor.

4.logic building

5.learnt about arduino IDLE and arduino board

Observation s:

1. As soon as the ball hits the target,the sensor reads the obstacle signal and gives the output signal accordingly.

2. When this happens the code makes an increment of 1 in the scoring and hence the result is diplayed.

3. How arduino and snsors can be used for making games

.Problems and Troubleshooting:

1.understanding as to which sensor is better LDR or ultrasonic sensor for solving the problem.

2.proper designing of the code and the circuit

3.troubleshooting the simulation problem in tinkercad .

Precautions:

1. All connections should be made tight and all the components should be checked before usage.

2.void setup() should be declared correctly with proper pin mode declaration.

3. Led and sensor shoud be connected to the correct pin of the arduino as declared in the code function.

Learning Outcomes:

1. Learning about the actual working of sensor and arduino.

2.looking at th practical usage of arduinos and ultrasonic sensor.

3. Game designing.