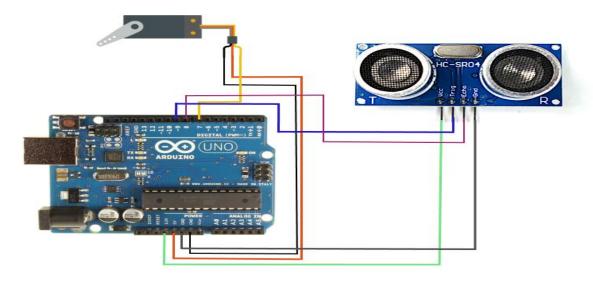
## **Circuit**



This is the circuit for uplevel servo by measuring distance using ultrasonic sensor

## Code:

```
#include <Servo.h>
Servo servo1;
int trigPin = 9;
int echoPin = 8;
long distance;
long duration;
void setup()
{
    servo1.attach(7);
    pinMode(trigPin, OUTPUT);
    pinMode(echoPin, INPUT);// put your setup code here, to run once:
}
void loop()
{
```

```
ultra_sonic();
 servo1.write(90);
 if(distance <=20)</pre>
 servo1.write(270);
 }
void ultra_sonic()
 digitalWrite(trigPin, LOW);
 delayMicroseconds(2);
 digitalWrite(trigPin, HIGH);
 delayMicroseconds(10);
 digitalWrite(trigPin, LOW);
 duration = pulseIn(echoPin, HIGH);
 distance = duration*0.034/2;
 }
```

## **Components**:

- 1. Arduino uno
- 2. Ultrasound sensor
- 3. Servo motor
- 4. Jumper wires

## About:

In this project when an obstacle will appear in a certain distance in front of the ultrasound sensor the servo will turn 90° .if the obstacle is removed it will rotate -90° again and come back to the past position