

Exp 6

long cm = 0;

```
long readUltrasonicDistance(int triggerPin, int echoPin)
{
    pinMode(triggerPin, OUTPUT); // Clear the trigger
    digitalWrite(triggerPin, LOW);
    delayMicroseconds(2);
    // Sets the trigger pin to HIGH state for 10 microseconds
    digitalWrite(triggerPin, HIGH);
    delayMicroseconds(10);
    digitalWrite(triggerPin, LOW);
    pinMode(echoPin, INPUT);
    // Reads the echo pin, and returns the sound wave travel time in microseconds *0.01723
    return (pulseIn(echoPin, HIGH)*0.01723);
}
```

```
void setup()
{
    Serial.begin(9600);

    pinMode(2, OUTPUT);
    pinMode(3, OUTPUT);
    pinMode(4, OUTPUT);
}
```

```
void loop()
{
    cm = readUltrasonicDistance(7, 6); //7-trigger, 6- echo
    Serial.print(cm);
    Serial.println("cm");
    if(cm>250)
    {
        digitalWrite(2,LOW);
        digitalWrite(3,LOW);
        digitalWrite(4,LOW);
    }
    if(cm<=250&&cm>175)
    {
        digitalWrite(2,HIGH);
        digitalWrite(3,LOW);
        digitalWrite(4,LOW);
    }
    if(cm<=175&&cm>100)
    {
        digitalWrite(2,HIGH);
    }
}
```

```

digitalWrite(3,HIGH);
digitalWrite(4,LOW);
}
if(cm<=100)
{
  digitalWrite(2,HIGH);
  digitalWrite(3,HIGH);
  digitalWrite(4,HIGH);
}

```

```

delay(100); // Wait for 100 millisecond(s)
}

```

