**ARDUINO CODE FOR LED DISTANCE INDICATOR :**

const int trig = 11;

const int echo = 12;

const int LED1 = 2;

const int LED2 = 3;

const int LED3 = 4;

const int LED4 = 5;

const int LED5 = 6;

const int LED6 = 7;

const int LED7 = 8;

int duration = 0;

int distance = 0;

void setup()

{

pinMode(trig , OUTPUT);

pinMode(echo , INPUT);

pinMode(LED1 , OUTPUT);

pinMode(LED2 , OUTPUT);

pinMode(LED3 , OUTPUT);

pinMode(LED4 , OUTPUT);

pinMode(LED5 , OUTPUT);

pinMode(LED6 , OUTPUT);

pinMode(LED7 , OUTPUT);

Serial.begin(9600);

}

void loop()

{

digitalWrite(trig , HIGH);

delayMicroseconds(1000);

digitalWrite(trig , LOW);

duration = pulseIn(echo , HIGH);

distance = (duration/2) / 28.5 ;

Serial.println(distance);

if ( distance <= 5 )

{digitalWrite(LED1, HIGH);}

else

{digitalWrite(LED1, LOW);}

if ( distance <= 7 )

{digitalWrite(LED2, HIGH);}

else

{digitalWrite(LED2, LOW);}

if ( distance <= 10 )

{digitalWrite(LED3, HIGH);}

else

{digitalWrite(LED3, LOW);}

if ( distance <= 15 )

{digitalWrite(LED4, HIGH);}

else

{digitalWrite(LED4, LOW);}

if ( distance <= 17 )

{digitalWrite(LED5, HIGH);}

else

{digitalWrite(LED5, LOW);}

if ( distance <= 20 )

{digitalWrite(LED6, HIGH);}

else

{digitalWrite(LED6, LOW);}

if ( distance <= 25 )

{digitalWrite(LED7, HIGH);}

else

{digitalWrite(LED7, LOW);}

}