IoT BASED ARDUINO KIT TRAINING

1.Program for 3 LED lights to glow repeatedly in loop:

int ledpin1=13,ledpin2=12,ledpin3=11,ledpin4=10;

void setup() {

pinMode(ledpin1,OUTPUT);

pinMode(ledpin2,OUTPUT);

pinMode(ledpin3,OUTPUT);

pinMode(ledpin4,OUTPUT);

// put your setup code here, to run once:

}

void loop() {

digitalWrite(ledpin1,HIGH);

delay(2000);

digitalWrite(ledpin1,LOW);

delay(1000);

digitalWrite(ledpin2,HIGH);

delay(200);

digitalWrite(ledpin2,LOW);

delay(1000);

digitalWrite(ledpin3,HIGH);

delay(2000);

digitalWrite(ledpin3,LOW);

delay(1000);

digitalWrite(ledpin4,HIGH);

delay(2000);

digitalWrite(ledpin4,LOW);

delay(1000);

// put your main code here, to run repeatedly:

}

2.Program for calculating the distance of an Object using Sensor:

int trigpin=12,echopin=13,buz=11;

void setup() {

Serial.begin(9600);

pinMode(trigpin,OUTPUT);

pinMode(echopin,INPUT);

pinMode(buz,OUTPUT);

// put your setup code here, to run once:

}

void loop() {

long duration,distance;

digitalWrite(trigpin,HIGH);

delayMicroseconds(100);

digitalWrite(trigpin,LOW);

duration=pulseIn(echopin,HIGH);

distance=(duration/2)/29.1;

Serial.print(distance);

Serial.println("CM");

if(distance<10)

{

digitalWrite(buz,HIGH);

}

else

{

digitalWrite(buz,LOW);

}

delay(1000);

// put your main code here, to run repeatedly:

}

3.To sense the temperature of an human body using IR –Rays for Security system using PIR Sensor:

int ledpin1=13,ledpin2=12,pirpin=2,val=0;

void setup() {

pinMode(ledpin1,OUTPUT);

pinMode(ledpin2,OUTPUT);

pinMode(pirpin,INPUT);

delay(15000);

// put your setup code here, to run once:

}

void loop() {

val=digitalRead(pirpin);

if(val==1)

{

digitalWrite(ledpin1,val);

delay(50);

digitalWrite(ledpin1,LOW);

delay(50);

digitalWrite(ledpin2,val);

delay(50);

digitalWrite(ledpin2,LOW);

delay(50);

}

else{

digitalWrite(ledpin1,LOW);

digitalWrite(ledpin2,LOW);}

// delay(50);

// put your main code here, to run repeatedly:

}