

AS-SALAM COLLEGE OF ENGINEERING & TECHNOLOGY
THIRUMANGALAKUDI-ADUTHURAI

IOT Assignment: Assignment no.1

Topic: Build smart home using all sensors

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CODE:

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

void loop()
{
    double a = analogRead(A0);
    Serial.print("Analog Value: ");
    Serial.println(a);
    double ca = a/1024;
    Serial.print("converted Analog value: ");
    Serial.println(ca);
    double v = ca * 5;
    Serial.print("voltage value: ");
```

```
Serial.println(v);  
double o = v-0.5;  
Serial.print("offset value: ");  
Serial.println(o);  
double c = o*100;  
Serial.print("celsius value: ");  
Serial.println(c);  
delay(2000);  
}  
  
#include<Servo.h>  
  
Servo s;  
  
void setup()  
{  
  s.attach(3);  
}  
  
void loop()  
{  
  s.write(0);  
  delay(1000);  
  s.write(30);  
  delay(1000);  
  s.write(70);  
  delay(1000);  
  s.write(130);  
  delay(1000);  
}
```

```
s.write(180);  
delay(1000);  
}  
  
int buzz = 12;  
  
void setup()  
{  
  pinMode(buzz,OUTPUT);  
}
```

```
  
void loop()  
{  
  tone(buzz, 131);  
  delay(250);  
  noTone(buzz);  
  delay(125);  
  tone(buzz, 131);  
  delay(250);  
  tone(buzz, 147);  
  delay(500);  
  tone(buzz, 131);  
  delay(500);  
  tone(buzz, 175);  
  delay(500);  
  tone(buzz, 165);  
  delay(1000);  
  tone(buzz, 131);  
}
```

```
    delay(250);  
noTone(buzz);  
    delay(125);  
    tone(buzz, 131);  
    delay(250);  
    tone(buzz, 147);  
    delay(500);  
    tone(buzz, 131);  
    delay(500);  
    tone(buzz, 196);  
    delay(500);  
    tone(buzz, 175);  
    delay(1000);  
    tone(buzz, 131);  
    delay(250);  
noTone(buzz);  
    delay(125);  
    tone(buzz, 131);  
    delay(250);  
    tone(buzz, 262);  
    delay(500);  
    tone(buzz, 220);  
    delay(500);  
    tone(buzz, 175);  
    delay(500);  
    tone(buzz, 165);
```

```
    delay(500);
    tone(buzz, 147);
    delay(500);
    tone(buzz, 233);
delay(250);
    noTone(buzz);
    delay(125);
    tone(buzz, 233);
    delay(250);
    tone(buzz, 220);
    delay(500);
    tone(buzz, 175);
    delay(500);
    tone(buzz, 196);
    delay(500);
    tone(buzz, 175);
    delay(1000);
    noTone(buzz);
    delay(100);
}

void setup(){
    pinMode(0,OUTPUT);
    pinMode(1,OUTPUT);
    pinMode(2,OUTPUT);
    pinMode(3,OUTPUT);
    pinMode(4,OUTPUT);
```

```
pinMode(5,OUTPUT);
pinMode(6,OUTPUT);
}
void loop(){

    digit (0,0,0,0,0,0,1);
    delay(1000);
    digit (1,0,0,1,1,1,1);
    delay(1000);
    digit (0,0,1,0,0,1,0);
    delay(1000);
    digit (0,0,0,0,1,1,0);
    delay(1000);
    digit (1,0,0,1,1,0,0);
    delay(1000);
    digit (0,1,0,0,1,0,0);
    delay(1000);
    digit (0,1,0,0,0,0,0);
    delay(1000);
    digit (0,0,0,1,1,1,1);
    delay(1000);
    digit (0,0,0,0,0,0,0);
    delay(1000);
    digit (0,0,0,0,1,0,0);
    delay(1000);
}
```

```
void digit(int a0, int a1, int a2, int a3, int a4, int a5, int a6)
{
    digitalWrite(0,a0);
    digitalWrite(1,a1);
    digitalWrite(2,a2);
    digitalWrite(3,a3);
    digitalWrite(4,a4);
    digitalWrite(5,a5);
    digitalWrite(6,a6);
}
```