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);
}
```