AS-SALAM COLLEGE OF ENGINEERING &TECHNOLOGY

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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: ");
```

```arduino
    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);
```

```arduino
  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);
}
```