**Assignment 1**

**Code:**

int temp,light,bulb=13,fan=12,buzzer=11;

void setup()

{

Serial.begin(9600);

pinMode(A0, INPUT);

pinMode(A1, INPUT);

pinMode(bulb,OUTPUT);

pinMode(fan,OUTPUT);

pinMode(buzzer,OUTPUT);

}

void loop()

{

//If temperature is greater than 24 degree celcius, the fan will turn on

//If temperature is greater than 30 degree celcius, the buzzer will turn on

//If light intensity is less than 500, the light bulb will turn on...

light=analogRead(A0);

temp=map(((analogRead(A1) - 20) \* 3.04), 0, 1023, -40, 125);

Serial.print(light);

Serial.print(" ");

Serial.println(temp);

if(light<500){

digitalWrite(bulb,HIGH);

}

else{

digitalWrite(bulb,LOW);

}

if(temp>24){

digitalWrite(fan,HIGH);

}

else{

digitalWrite(fan,LOW);

}

if(temp>30){

digitalWrite(buzzer,HIGH);

}

else{

digitalWrite(buzzer,LOW);

}

}

