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const int sensorPin = A0;
const float baselineTemp = 22.0;                                     **Sets Baseline Temperature (Degrees Celsius)**
void setup() {
  Serial.begin(9600); //opens serial port
  for(int pinNumber = 2; pinNumber<5; pinNumber ++){
    pinMode(pinNumber, OUTPUT);
    digitalWrite(pinNumber, LOW);
  }
}
void loop() {
  int sensorVal = analogRead(sensorPin);
  Serial.print("Sensor Value: ");
  Serial.print(sensorVal);
  //convert the ADC reading to voltage
  float voltage = (sensorVal/1024.0) * 5;
  Serial.print(", Volts: ");
  Serial.print(voltage);
  Serial.print(", degrees C: ");
  //convert the voltage to temperature in degrees
  float temperature = (voltage - .5) *100;
  Serial.println(temperature);
  if(temperature < baselineTemp){
    digitalWrite(2, LOW);
    digitalWrite(3, LOW);
    digitalWrite(4, LOW);
    digitalWrite(5, LOW);
  }else if(temperature >= baselineTemp+1 &&                               **Sets Temperature Range for First LED**
    temperature < baselineTemp+2){
    digitalWrite(2, HIGH);
    digitalWrite(3, LOW);
    digitalWrite(4, LOW);
    digitalWrite(5, LOW);
  }else if(temperature >= baselineTemp+2 &&                               **Sets Temperature Range for Second LED**
    temperature < baselineTemp+3){
    digitalWrite(2, HIGH);
    digitalWrite(3, HIGH);
    digitalWrite(4, LOW);
    digitalWrite(5, LOW);
  }else if(temperature >= baselineTemp+3 &&                               **Sets Temperature Range for Third LED**
    temperature < baselineTemp+4){
    digitalWrite(2, HIGH);
    digitalWrite(3, HIGH);
    digitalWrite(4, HIGH);
    digitalWrite(5, LOW);
  }else if(temperature >= baselineTemp+4){                               **Sets Fan Activation Temperature**
    digitalWrite(2, HIGH);

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digitalWrite(3, HIGH);  
digitalWrite(4, HIGH);  
digitalWrite(5, HIGH);  
delay (2000);  
}  
delay (1);  
}
```

****Sets Time Delay for Fan Shutoff****