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This is a library example for the MLX90614 Temp Sensor

Designed specifically to work with the MLX90614 sensors in the
adafruit shop

----> <https://www.adafruit.com/products/1748>

----> <https://www.adafruit.com/products/1749>

These sensors use I2C to communicate, 2 pins are required to
interface

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#include <Wire.h>
#include <Adafruit_MLX90614.h>
#include "Adafruit_NeoPixel.h"
int tanker=57;
Adafruit_MLX90614 mlx = Adafruit_MLX90614();
Adafruit_NeoPixel strip=Adafruit_NeoPixel(57,9, NEO_GRB + NEO_KHZ800);

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

  Serial.println("Adafruit MLX90614 test");
  strip.begin();
  strip.show();

  mlx.begin();
}

void loop() {

  int teach=0;
  Serial.print("Ambient = "); Serial.print(mlx.readAmbientTempC());
  Serial.print("C\tObject = "); Serial.print(mlx.readObjectTempC()); Serial.println("C");
  Serial.print("Ambient = "); Serial.print(mlx.readAmbientTempF());
  Serial.print("F\tObject = "); Serial.print(mlx.readObjectTempF()); Serial.println("F");

  for (int indo=0;indo<10;indo++)
```

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{
  int peach=mlx.readObjectTempF();//takes average of ten temperature readings
  teach=teach+peach;
  delay(40);
}
int peach=teach/10;

Serial.println(peach);

int x=0;
int pal=0;
int zig=0;
int zag=0;
int zog=0;
// 4 seconds per reading for 16 samples per reading

peach=constrain(peach, 58, 75);//eliminates higher or lower temps
peach=map(peach, 58,75, 0,tanker);//sets the limits for display on therm

for(x=0; x<peach; x++)
{
  zog=map(x,0,tanker,0,255);
  zag=0;
  zig=map(x,0,tanker,255,0);
  strip.setPixelColor(x,zog,zag,zig);
}
for(x=peach; x<tanker;x++)
{
  strip.setPixelColor(x,0,0,0);
  strip.show();
}
}

```