

MAIN CODE FOR ECG AND TEMPERATURE SENSOR

```
#include <Wire.h>

#include <Adafruit_MLX90614.h>

#include <WiFi.h>

#define ECG_PIN A0 // Analog pin for ECG sensor

// WiFi credentials
const char* ssid = "YourWiFiSSID";
const char* password = "YourWiFiPassword";

// ECG variables
unsigned long ecgReading;
unsigned long lastTime = 0;
const int ecgInterval = 20; // Interval between ECG readings in milliseconds

// Initialize the temperature sensor
Adafruit_MLX90614 mlx = Adafruit_MLX90614();

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

  // Connect to WiFi
  WiFi.begin(ssid, password);
  while (WiFi.status() != WL_CONNECTED) {
    delay(1000);
    Serial.println("Connecting to WiFi...");
```

```
}  
  
Serial.println("Connected to WiFi");  
  
  
// Initialize temperature sensor  
mlx.begin();  
  
  
// Set ECG pin as input  
pinMode(ECG_PIN, INPUT);  
}  
void loop() {  
    // Read temperature  
    float objTempC = mlx.readObjectTempC();  
    Serial.print("Object Temperature: ");  
    Serial.print(objTempC);  
    Serial.println(" °C");  
  
  
    // Read ECG  
    unsigned long currentTime = millis();  
    if (currentTime - lastTime >= ecgInterval) {  
        ecgReading = analogRead(ECG_PIN);  
        Serial.print("ECG Reading: ");  
        Serial.println(ecgReading);  
        lastTime = currentTime;  
    }  
  
    // Add your code for sending data to a server or performing any other actions here  
  
    delay(1000); // Delay between readings  
}
```