// PulseSensorMonitor

// Pin Definitions

const int PULSE\_SENSOR\_PIN = A0; // Analog input pin 0

const int LED\_PIN = LED\_BUILTIN; // Built-in LED pin

// Variables

int Signal = 0; // Variable to store ADC data (0-1024)

const int Threshold = 550; // Threshold value

void setup() {

// Initialize System

pinMode(LED\_PIN, OUTPUT); // Set LED pin as output

Serial.begin(9600); // Start serial communication at 9600 baud

}

void loop() {

// Monitor Pulse Sensor

Signal = analogRead(PULSE\_SENSOR\_PIN); // Read analog signal

Serial.println(Signal); // Print signal to serial plotter

// Check Signal Threshold

if (Signal > Threshold) {

digitalWrite(LED\_PIN, HIGH); // Turn on LED

} else {

digitalWrite(LED\_PIN, LOW); // Turn off LED

}

delay(10); // Delay for 10 milliseconds

}