***Code that we have used***

#define SENSOR\_PIN 10 // IR sensor pin

#define BUZZER\_PIN 13 // Buzzer pin

unsigned long lastMotionTime = 0; // Variable to store the time of last motion detection

unsigned long buzzerDelay = 7000; // Time delay in milliseconds before activating the buzzer (5 seconds)

void setup() {

pinMode(SENSOR\_PIN, INPUT);

pinMode(BUZZER\_PIN, OUTPUT);

}

void loop() {

int motion = digitalRead(SENSOR\_PIN); // Read motion sensor

if (motion == HIGH) { // If motion detected

lastMotionTime = millis(); // Update last motion time

digitalWrite(BUZZER\_PIN, LOW); // Turn off the buzzer

} else { // If no motion detected

unsigned long currentTime = millis(); // Get current time

unsigned long timeElapsed = currentTime - lastMotionTime; // Calculate time elapsed since last motion

if (timeElapsed >= buzzerDelay) { // If time exceeded buzzerDelay

digitalWrite(BUZZER\_PIN, HIGH); // Turn on the buzzer

}

}

delay(100); // Delay between readings

}