Code

```
// Define PIR sensor pins

int ledPirPins[] = {3, 4, 5, 6, 7};    // PIRs that trigger audio playback

int playPirPins[] = {9, 11, 12, 13, 10}; // PIRs that trigger LED

int ledPin = 8;   // LED pin

int playEPin = 2; // ISD1820 PLAYE pin

void setup() {

   Serial.begin(9600);

   // Set PIR pins as input with pull-up resistors

   for (int i = 0; i < 5; i++) {

      pinMode(playPirPins[i], INPUT_PULLUP);

      pinMode(ledPirPins[i], INPUT_PULLUP);

   }      // Set LED and ISD1820 play pin as output

   pinMode(ledPin, OUTPUT);

   pinMode(playEPin, OUTPUT);

   digitalWrite(playEPin, LOW); // Ensure PLAYE is LOW initially

}

void loop() {

   bool playTriggered = false;

   bool ledTriggered = false;
```

```
    // Debugging: Print PIR sensor values
Serial.println("Checking sensors...");
    // Check PIR sensors for playing audio
for (int i = 0; i < 5; i++) {
    int state = digitalRead(playPirPins[i]);
    Serial.print("PLAY PIR ");
    Serial.print(playPirPins[i]);
    Serial.print(" state: ");
    Serial.println(state);
          if (state == HIGH) {
       playTriggered = true;
    }
}
// Check PIR sensors for turning on LED
for (int i = 0; i < 5; i++) {
    int state = digitalRead(ledPirPins[i]);
    Serial.print("LED PIR ");
    Serial.print(ledPirPins[i]);
    Serial.print(" state: ");
    Serial.println(state);
```

```
            if (state == HIGH) {
          ledTriggered = true;
        }
      }
      // Play audio if any of the play PIRs detected motion
      if (playTriggered) {
        Serial.println("Playing audio...");
        digitalWrite(playEPin, HIGH);
        delay(100);  // Short pulse for ISD1820
        digitalWrite(playEPin, LOW);
      }
      // Turn LED on/off based on LED PIRs
      if (ledTriggered) {
        Serial.println("Turning LED ON");
        digitalWrite(ledPin, HIGH);
      } else {
        Serial.println("Turning LED OFF");
        digitalWrite(ledPin, LOW);
      }       delay(500); // Small delay to prevent multiple triggers
}
```