```
// Soil Moisture Sensor Pin
const int soilSensorPin = A0;

// PIR Motion Sensor Pin
const int motionSensorPin = 2;

// LED Pin
const int ledPin = 13;

// Interrupt Pin
const int interruptPin = 3;

// Soil Moisture Sensor Reading
int soilMoistureReading = 0;

// PIR Motion Sensor State
volatile int motionSensorState = LOW;

// Interrupt Flag
volatile bool interruptFlag = false;

void setup() {
  // Initialize Serial Communication
  Serial.begin(9600);
```

```
  // Set Pin Modes
  pinMode(soilSensorPin, INPUT);
  pinMode(motionSensorPin, INPUT);
  pinMode(ledPin, OUTPUT);
  pinMode(interruptPin, INPUT_PULLUP);

  // Attach Interrupt
  attachInterrupt(digitalPinToInterrupt(interruptPin), interruptHandler, CHANGE);

  // Turn Off LED
  digitalWrite(ledPin, LOW);
}

void loop() {
  // Read Soil Moisture Sensor
  soilMoistureReading = analogRead(soilSensorPin);
  Serial.print("Soil Moisture Reading: ");
  Serial.println(soilMoistureReading);

  // Check Motion Sensor State
  if (motionSensorState == HIGH) {
    Serial.println("Motion Detected!");
    digitalWrite(ledPin, HIGH);
  } else {
    digitalWrite(ledPin, LOW);
```

```
  }

  // Check Interrupt Flag
  if (interruptFlag) {
    Serial.println("Interrupt Triggered!");
    // Do Something Here
    interruptFlag = false;
  }

  // Delay
  delay(1000);
}

// Interrupt Handler Function
void interruptHandler() {
  motionSensorState = digitalRead(motionSensorPin);
  interruptFlag = true;
}
```