```
/*
 This example demonstrates the use of if() statements.
 It reads the state of a potentiometer (an analog input) and turns on an LED
 only if the potentiometer goes above a certain threshold level. It prints the
analog value
 regardless of the level.

 The circuit:
 * potentiometer connected to analog pin 3.
 Center pin of the potentiometer goes to the analog pin.
 side pins of the potentiometer go to +5V and ground
 * LED connected from digital pin 13 to ground

 * Note: On most Arduino boards, there is already an LED on the board
 connected to pin 13, so you don't need any extra components for this example.
*/

// These constants won't change:
const int analogPin = A3; // Pin that the sensor is attached to
const int ledPin = 13; // Pin that the LED is attached to
const int threshold = 400; // An arbitrary threshold level that is in the range of
the analog input

void setup()
{
  pinMode(ledPin, OUTPUT); // Initialize the LED pin as an output
  Serial.begin(9600); // Initialize serial communications
}

void loop()
{
  int analogValue = analogRead(analogPin); // Read the value of the potentiometer

  // If the analog value is high enough, turn on the LED:
  if (analogValue > threshold)
  {
    digitalWrite(ledPin, HIGH);
  }
  else
  {
    digitalWrite(ledPin, LOW);
  }

  Serial.println(analogValue); // Print the analog value
  delay(1); // Delay in between reads for stability
}
```