**Code:**

#define BUTTON\_PIN 2 // Push button pin

#define DEBOUNCE\_DELAY 50 // Debounce delay in milliseconds

int buttonState = HIGH; // Current button state

int lastButtonState = HIGH; // Previous button state

int buttonPressCount = 0; // Counter

unsigned long lastDebounceTime = 0;

void setup() {

pinMode(BUTTON\_PIN, INPUT\_PULLUP); // Internal pull-up

Serial.begin(9600);

Serial.println("Button Counter Ready...");

}

void loop() {

int reading = digitalRead(BUTTON\_PIN);

// Debouncing logic

if (reading != lastButtonState) {

lastDebounceTime = millis();

}

if ((millis() - lastDebounceTime) > DEBOUNCE\_DELAY) {

if (reading == LOW && buttonState == HIGH) {

buttonPressCount++;

Serial.println("Button pressed: " + String(buttonPressCount));

}

buttonState = reading;

}

lastButtonState = reading;

}

**Circuit Diagram:**

