Push Button Count & Second Fingerprint Verification – Explanation and Code:

**Explanation:**  
Push buttons are used for party selection. They can be connected via a resistor ladder to one analog input (or individually to digital pins). After a voter selects a party, the second fingerprint sensor verifies their thumb fingerprint to confirm the vote.

// Example for reading push buttons via a resistor ladder on A0

int readPartySelection() {

int sensorValue = analogRead(A0);

if(sensorValue < 200) return 1;

else if(sensorValue < 400) return 2;

else if(sensorValue < 600) return 3;

else if(sensorValue < 800) return 4;

else return 0;

}

// Vote Confirmation Example using Sensor 2:

uint8\_t voterThumbID = getFingerprintID(finger2);

if (voterThumbID != expectedVoterID) {

digitalWrite(voteRed, HIGH);

// Activate buzzer here as well.

} else {

digitalWrite(voteGreen, HIGH);

// Record vote, increment count, etc.

}