**Fingerprint Matching – Explanation and Code**

**Explanation:**  
Fingerprint matching is performed by capturing a fingerprint, converting it to a template, and searching the stored templates for a match. This function is used during registration as well as during both entry and vote confirmation stages at the polling station.

uint8\_t getFingerprintID(Adafruit\_Fingerprint &finger) {

uint8\_t p = finger.getImage();

if (p != FINGERPRINT\_OK) return p;

p = finger.image2Tz();

if (p != FINGERPRINT\_OK) return p;

p = finger.fingerFastSearch();

if (p != FINGERPRINT\_OK) {

Serial.println("Fingerprint not found.");

return p;

}

Serial.print("Found ID #");

Serial.print(finger.fingerID);

Serial.print(" with confidence: ");

Serial.println(finger.confidence);

return finger.fingerID;

}