#define FAN\_PIN 5

bool rainDetected = false;

void setup() {

Serial.begin(9600);

pinMode(FAN\_PIN, OUTPUT);

digitalWrite(FAN\_PIN, LOW); // Default OFF

Serial.println("Type 'rain' or 'clear'");

}

void loop() {

if (Serial.available()) {

String input = Serial.readStringUntil('\n');

input.trim();

if (input == "rain") {

rainDetected = true;

Serial.println("Raining: Fan OFF");

} else if (input == "clear") {

rainDetected = false;

Serial.println("Clear: Fan ON if hot");

}

}

// Simulate temperature sensor with A0 (e.g., potentiometer)

int tempRaw = analogRead(A0);

float temp = map(tempRaw, 0, 1023, 0, 50);

if (!rainDetected && temp > 28) {

digitalWrite(FAN\_PIN, HIGH);

} else {

digitalWrite(FAN\_PIN, LOW);

}

delay(1000);

}