

PROGRAM ARDUINO

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int pos = 0;
int motor1Pin1 = 3;
int motor1Pin2 = 4;
int enable1Pin = 6;
int motor2Pin1 = 8;
int motor2Pin2 = 9;
int enable2Pin = 11;
int state;
int flag=0;
int stateStop=0;
void setup() {
    // Set Motor DC sebagai output:
    pinMode(motor1Pin1, OUTPUT);
    pinMode(motor1Pin2, OUTPUT);
    pinMode(enable1Pin, OUTPUT);
    pinMode(motor2Pin1, OUTPUT);
    pinMode(motor2Pin2, OUTPUT);
    pinMode(enable2Pin, OUTPUT);
    // Set Enable pada 2 buah Motor DC
    digitalWrite(enable1Pin, HIGH);
    digitalWrite(enable2Pin, HIGH);
    // inisialisasi komunikasi serial
    Serial.begin(9600);
}

void loop() {
    // Jika data diterima, maka dimasukkan ke variabel state
    if(Serial.available() > 0){
        state = Serial.read();
        flag=0;
    }
    // Jika state = F, maka Motor DC bergerak maju
    if (state == 'F') {
        digitalWrite(motor1Pin1, HIGH);
        digitalWrite(motor1Pin2, LOW);
        digitalWrite(motor2Pin1, LOW);
        digitalWrite(motor2Pin2, HIGH);
        if(flag == 0){
            Serial.println("MAJU");
            flag=1;
        }
    }
    // Jika state = L, maka Motor DC berbelok ke kiri
    else if (state == 'L') {
        digitalWrite(motor1Pin1, HIGH);
        digitalWrite(motor1Pin2, LOW);
        digitalWrite(motor2Pin1, HIGH);
    }
}
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        digitalWrite(motor2Pin2, LOW);
        if(flag == 0){
            Serial.println("BELOK KIRI");
            flag=1;
        }
        delay(350);
        state=3;
        stateStop=1;
    }
    // Jika state = S, maka Motor DC akan berhenti
    else if (state == 'S' || stateStop == 1) {
        digitalWrite(motor1Pin1, LOW);
        digitalWrite(motor1Pin2, LOW);
        digitalWrite(motor2Pin1, LOW);
        digitalWrite(motor2Pin2, LOW);
        if(flag == 0){
            Serial.println("BERHENTI DULU");
            flag=1;
        }
        stateStop=0;
    }
    // Jika state = R, maka Motor DC berbelok ke kanan
    else if (state == 'R') {
        digitalWrite(motor1Pin1, LOW);
        digitalWrite(motor1Pin2, HIGH);
        digitalWrite(motor2Pin1, LOW);
        digitalWrite(motor2Pin2, HIGH);
        if(flag == 0){
            Serial.println("BELOK KANAN");
            flag=1;
        }
        delay(350);
        state=3;
        stateStop=1;
    }
    // Jika state = B, maka Motor DC bergerak mundur
    else if (state == 'B') {
        digitalWrite(motor1Pin1, LOW);
        digitalWrite(motor1Pin2, HIGH);
        digitalWrite(motor2Pin1, HIGH);
        digitalWrite(motor2Pin2, LOW);
        if(flag == 0){
            Serial.println("MUNDUR");
            flag=1;
        }
    }
}
}

```