// connect motor controller pins to Arduino digital pins

// motor one

int enA = 10;

int in1 = 9;

int in2 = 8;

// motor two

int enB = 5;

int in3 = 7;

int in4 = 6;

void setup() {

// put your setup code here, to run once:

pinMode(enA, OUTPUT);

pinMode(enB, OUTPUT);

pinMode(in1, OUTPUT);

pinMode(in2, OUTPUT);

pinMode(in3, OUTPUT);

pinMode(in4, OUTPUT);

}

void loop() {

// put your main code here, to run repeatedly:

Forward();

Brake();

}

void Forward(){

digitalWrite(in1, HIGH);

digitalWrite(in2, LOW);

analogWrite(enA, 200);

digitalWrite(in3, HIGH);

digitalWrite(in4, LOW);

analogWrite(enB, 200);

delay(200);

}

void Reverse(){

digitalWrite(in1, LOW);

digitalWrite(in2, HIGH);

analogWrite(enA, 200);

digitalWrite(in3, LOW);

digitalWrite(in4, HIGH);

analogWrite(enB, 200);

delay(200);

}

void Brake() {

digitalWrite(in1, LOW);

digitalWrite(in2, LOW);

analogWrite(enA, 200);

digitalWrite(in3, LOW);

digitalWrite(in4, LOW);

analogWrite(enB, 200);

delay(200);

}

void Coast() {

analogWrite(enA, 0);

analogWrite(enB, 0);

}

void TurnLeft(){

digitalWrite(in1, HIGH);

digitalWrite(in2, LOW);

analogWrite(enA, 50);

digitalWrite(in3, HIGH);

digitalWrite(in4, LOW);

analogWrite(enB, 200);

delay(200);

}

void TurnRight() {

digitalWrite(in1, HIGH);

digitalWrite(in2, LOW);

analogWrite(enA, 200);

digitalWrite(in3, HIGH);

digitalWrite(in4, LOW);

analogWrite(enB, 50);

delay(200);

}

void PivotLeft() {

digitalWrite(in1, HIGH);

digitalWrite(in2, LOW);

analogWrite(enA, 0);

digitalWrite(in3, HIGH);

digitalWrite(in4, LOW);

analogWrite(enB, 200);

delay(200);

}

void PivotRight(){

digitalWrite(in1, HIGH);

digitalWrite(in2, LOW);

analogWrite(enA, 200);

digitalWrite(in3, HIGH);

digitalWrite(in4, LOW);

analogWrite(enB, 0);

delay(200);

}