// 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;

volatile int count = 0, sw = 0, dist = 0;;

void setup() {

pinMode(2,INPUT\_PULLUP);

pinMode(3,INPUT\_PULLUP);

attachInterrupt(0,isr0,RISING);

Serial.begin(9600);

// 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() {

if(sw == 1){

Serial.print(count\*(PI/180)\*30); //printout distance traveled

Serial.println("millimeters traveled");

dist = count\*(PI/180)\*3;

sw = 0;

}

if (dist < 3){

Forward();

}

Forward();

delay(500);

}

cmForward (int x){

if (dist < x){

Forward();

}

}

cmReverse(int x){

if

}

void isr0(void){

count++;

sw = 1;

}

void rdelay(int dt){

int ct, pt;

pt = millis();

ct = pt;

while (ct - pt < dt){

ct = millis();

}

}

void Forward(){

digitalWrite(in1, HIGH);

digitalWrite(in2, LOW);

analogWrite(enA, 100);

digitalWrite(in3, HIGH);

digitalWrite(in4, LOW);

analogWrite(enB, 100);

}

void Reverse(){

digitalWrite(in1, LOW);

digitalWrite(in2, HIGH);

analogWrite(enA, 100);

digitalWrite(in3, LOW);

digitalWrite(in4, HIGH);

analogWrite(enB, 100);

}

void Brake() {

digitalWrite(in1, LOW);

digitalWrite(in2, LOW);

analogWrite(enA, 100);

digitalWrite(in3, LOW);

digitalWrite(in4, LOW);

analogWrite(enB, 100);

}

void Coast() {

analogWrite(enA, 0);

analogWrite(enB, 0);

}

void TurnLeft(){

digitalWrite(in1, HIGH);

digitalWrite(in2, LOW);

analogWrite(enA, 0);

digitalWrite(in3, HIGH);

digitalWrite(in4, LOW);

analogWrite(enB, 100);

}

void TurnRight() {

digitalWrite(in1, HIGH);

digitalWrite(in2, LOW);

analogWrite(enA, 100);

digitalWrite(in3, HIGH);

digitalWrite(in4, LOW);

analogWrite(enB, 0);

}

void PivotLeft() {

digitalWrite(in1, LOW);

digitalWrite(in2, HIGH);

analogWrite(enA, 100);

digitalWrite(in3, HIGH);

digitalWrite(in4, LOW);

analogWrite(enB, 100);

}

void PivotRight(){

digitalWrite(in1, HIGH);

digitalWrite(in2, LOW);

analogWrite(enA, 100);

digitalWrite(in3, LOW);

digitalWrite(in4, HIGH);

analogWrite(enB, 100);

}