//Blue Robotics basic thruster control program using remote potentiometers.

int LeftPotPin = 3; // control potentiometer wiper (middle terminal)

int RightPotPin = 4; // outside leads to ground and +5V

int LeftESCPin = 13; // motor ESC connected to digital pin

int RightESCPin = 14;

void setup()

{

 pinMode(LeftESCPin, OUTPUT); // sets the digital pin as output

 pinMode(RightESCPin, OUTPUT);

 Serial.begin(9600); // setup serial for debug

}

void loop()

{

 int LeftPotVal = analogRead(LeftPotPin); // read the input pin

 delay(10);

 int RightPotVal = analogRead(RightPotPin);

 delay(10);

 LeftPotVal = map(LeftPotVal, 0, 1023, 1100, 1900);

 RightPotVal = map(RightPotVal, 0, 1023, 1100, 1900);

 Serial.println(LeftPotVal); // debug value

 Serial.println(RightPotVal);

 digitalWrite(LeftESCPin, HIGH);

 delay(LeftPotVal);

 digitalWrite(LeftESCPin, LOW);

 digitalWrite(RightESCPin, HIGH);

 delay(RightPotVal);

 digitalWrite(RightESCPin, LOW);

 delay(10);

}