CODE:

```
const int analogInPin1 = A0;  // Analog input pin that the potentiometer is attached to
const int analogInPin2 = A5;

int sensorValue1 = 0;        // value read from the pot
int sensorValue2 = 0;
const int IN1 = 7;
const int IN2 = 6;
const int IN3 = 5;
const int IN4 = 4;

const int ENA = 9;
const int ENB = 3;


void setup() {
  Serial.begin(9600);

  pinMode (IN1, OUTPUT);
  pinMode (IN2, OUTPUT);
  pinMode (IN3, OUTPUT);
  pinMode (IN4, OUTPUT);
  pinMode (ENA, OUTPUT);
  pinMode (ENB, OUTPUT);
  // put your setup code here, to run once:


}

void loop() {
  digitalWrite(IN1, HIGH);
  digitalWrite(IN2, LOW);
  digitalWrite(IN3, HIGH);
  digitalWrite(IN4, LOW);

  // put your main code here, to run repeatedly:
  // read the input on analog pin 0:
  int sensorValue1 = analogRead(A0);
  // print out the value you read:
  int sensorValue2 = analogRead(A5);
  Serial.print("sensor1 = ");
  Serial.print(sensorValue1);
  Serial.print("\t sensor2 = ");
  Serial.println(sensorValue2);
  if(sensorValue1>800)
  {
  analogWrite(ENA, 255);
  }
  else if((sensorValue1>600)&&(sensorValue1<=800))
  {
  analogWrite(ENA, 190);
  }
  else if((sensorValue1>400)&&(sensorValue1<=600))
```

```
{
analogWrite(ENA, 130);
}
else if((sensorValue1>200)&&(sensorValue1<=400))
{
analogWrite(ENA, 100);
}
else{
  analogWrite(ENA, 0);
  }
if(sensorValue2>800)
{
analogWrite(ENB, 255);
}
else if((sensorValue2>600)&&(sensorValue2<=800))
{
analogWrite(ENB, 190);
}
else if((sensorValue2>400)&&(sensorValue2<=600))
{
analogWrite(ENB, 130);
}
else if((sensorValue2>200)&&(sensorValue2<=400))
{

  {
  analogWrite(ENB, 100);
  }
  else{
    analogWrite(ENB, 0);
  }

  delay(1);
}
```