```
/*
GLOSSÁRIO:
  mef -> motor esquerdo frente
  mdf -> motor direito frente
  met -> motor esquerdo trás
  mdt -> motor direito trás
  snd -> sensor direito
  sne -> sendor esquerdo
*/

int mdt = 5;
int mdf = 6;
int met = 11;
int mef = 10;

int snd = 4;
int sne = 3 ;

int echo = 9;
int trig = 8;
float distancia;

int motor_esquerdo = 108;
int motor_direito = 114;

void setup() {

  pinMode(mef,OUTPUT);
  pinMode(met,OUTPUT);
  pinMode(mdf,OUTPUT);
  pinMode(mdt,OUTPUT);

  pinMode(snd,INPUT);
  pinMode(sne,INPUT);

  pinMode (trig, OUTPUT);
  pinMode (echo,INPUT);

  Serial.begin(9600);
}
void loop() {

  digitalWrite(trig, LOW);
  delay(0005);
  digitalWrite(trig, HIGH);
  delay(0010);
  digitalWrite(trig, LOW);
```

```
  distancia = pulseIn (echo, HIGH);
  distancia = distancia/58;
  Serial.print("distancia: ");
  Serial.print(distancia);
  Serial.print("cm                    ");

  Serial.print("Sensor direito: ");
  Serial.print(digitalRead(snd));
  Serial.print(" Sensor esquerdo: ");
  Serial.println(digitalRead(sne));

    if(digitalRead(sne)==0 && digitalRead(snd)==0){
      analogWrite(mef, LOW);
      analogWrite(mdf, LOW);
      analogWrite(met, LOW);
      analogWrite(mdt, LOW);
    }
    if(digitalRead(sne)==0 && digitalRead(snd)==1){
      analogWrite(mef, LOW);
      analogWrite(mdf, motor_direito/2);
      analogWrite(met, motor_esquerdo/3);
      analogWrite(mdt, LOW);
    }
    if(digitalRead(sne)==1 && digitalRead(snd)==0){
      analogWrite(mef, motor_esquerdo/2);
      analogWrite(mdf, LOW);
      analogWrite(met, LOW);
      analogWrite(mdt, motor_direito/3);
    }
    if(digitalRead(sne)==1 && digitalRead(snd)==1){
      analogWrite(mef, motor_esquerdo);
      analogWrite(mdf, motor_direito);
      analogWrite(met, LOW);
      analogWrite(mdt, LOW);
    }

    if(distancia<=5){
      analogWrite(mef, LOW);
      analogWrite(mdf, LOW);
      analogWrite(met, LOW);
      analogWrite(mdt, LOW);
    }
}
```