```
#include <IRremote.h>

const int boutton = 13;
const char DIN_RECEPTEUR_INFRAROUGE = 4;
int bouttonon = 0;
IRrecv monRecepteurInfraRouge(DIN_RECEPTEUR_INFRAROUGE);

decode_results messageRecu;

int ENB = 6; //Connecté à Arduino pin 6(Sortie pwm)
int IN3 = 8; //Connecté à Arduino pin 8
int IN4 = 7; //Connecté à Arduino pin 7

int ENA = 9; //Connecté à Arduino pin 9(Sortie pwm)
int IN1 = 10; //Connecté à Arduino pin 10
int IN2 = 11; //Connecté à Arduino pin 11

char DOUT_TRIGGER = 12;
char DIN_ECHO = 3;
float distance = 50;

void setup() {
  pinMode(boutton, INPUT);
  monRecepteurInfraRouge.enableIRIn();

  pinMode(ENB, OUTPUT);
  pinMode(IN3, OUTPUT);
  pinMode(IN4, OUTPUT);

  pinMode(ENA, OUTPUT);
  pinMode(IN1, OUTPUT);
  pinMode(IN2, OUTPUT);

  Serial.begin(9600);

  digitalWrite(ENB, LOW); //Moteur B ne tourne pas
  digitalWrite(ENA, LOW); //Moteur A ne tourne pas

  Serial.begin(9600);
  pinMode(DOUT_TRIGGER, OUTPUT );
  pinMode(DIN_ECHO, INPUT);

}

void loop() {

  if (bouttonon == 0)
  {
    while (digitalRead(boutton) == HIGH
    && bouttonon == 0)
    {
      delay(200);
      bouttonon = 0;
    }
    delay(1000);
```

```
  bouttonon++;
}
else
{
}

while (bouttonon > 0)
{
  //mesure distance

  digitalWrite(DOUT_TRIGGER, LOW);
  delayMicroseconds(2);
  digitalWrite(DOUT_TRIGGER, HIGH);
  delayMicroseconds(10);
  digitalWrite(DOUT_TRIGGER, LOW);

  distance = pulseIn(DIN_ECHO, HIGH) / 58.0;
  if (distance < 10)
  {

    analogWrite(ENA, 0);
    analogWrite(ENB, 0);

    digitalWrite(IN3, HIGH);
    digitalWrite(IN4, LOW);
    digitalWrite(IN1, HIGH);
    digitalWrite(IN2, LOW);

    analogWrite(ENB, 150);
    analogWrite(ENA, 150);

    delay(500);
    analogWrite(ENA, 0);
    analogWrite(ENB, 0);
  }

  // fin test distance

  if (monRecepteurInfraRouge.decode(&messageRecu))
  {
    Serial.println(messageRecu.value, HEX);
    //aller derriere_____________________________________________________________

    if (messageRecu.value == 0xFF4AB5)
    {
      digitalWrite(IN3, HIGH);
      digitalWrite(IN4, LOW);
      digitalWrite(IN1, HIGH);
      digitalWrite(IN2, LOW);

      analogWrite(ENB, 150);
      analogWrite(ENA, 150);

    }
    //_____________________________________________________________________________
```

```
//aller à gauche_____________________________________________________

if (messageRecu.value == 0xFF10EF)
{
  digitalWrite(IN3, LOW);
  digitalWrite(IN4, HIGH);
  digitalWrite(IN1, HIGH);
  digitalWrite(IN2, LOW);

  analogWrite(ENB, 150);
  analogWrite(ENA, 150);

}
//_____________________________________________________________________

//aller à droite_____________________________________________________

if (messageRecu.value == 0xFF5AA5)
{
  digitalWrite(IN3, HIGH);
  digitalWrite(IN4, LOW);
  digitalWrite(IN1, LOW);
  digitalWrite(IN2, HIGH);

  analogWrite(ENB, 150);
  analogWrite(ENA, 150);

}
//_____________________________________________________________________

//aller devant_____________________________________________________

if (messageRecu.value == 0xFF18E7)
{
  digitalWrite(IN3, LOW);
  digitalWrite(IN4, HIGH);
  digitalWrite(IN1, LOW);
  digitalWrite(IN2, HIGH);

  analogWrite(ENB, 150);
  analogWrite(ENA, 150);

}
//_____________________________________________________________________

//stop_____________________________________________________

if (messageRecu.value == 0xFF38C7)
{

  analogWrite(ENB, 0);
  analogWrite(ENA, 0);

}
//_____________________________________________________________________
```

```
      monRecepteurInfraRouge.resume();
    }
    if (digitalRead(boutton) == HIGH)
    {
      bouttonon = 0;
      analogWrite(ENB, 0);
      analogWrite(ENA, 0);
      delay(500);
    }
  }
}
```