```
#include <boarddefs.h>
#include <IRremote.h>
#include <IRremoteInt.h>
#include <ir_Lego_PF_BitStreamEncoder.h>



#define trigPin 37   //Trig
#define echoPin 39    //Echo
#define mindist 5;
#define RECV_PIN1 A2;
#define RECV_PIN2 A3;
#define RECV_PIN3 A4;
#define PWMA 6;
#define PWMB 5;
#define AIN1 32;
#define AIN2 34;
#define BIN1 28;
#define BIN2 26;
#define STBY 30;
#define vitesse 120;
#define hall A1;

#include <IRremote.h>
IRrecv irrecv1(RECV_PIN1);
IRrecv irrecv2(RECV_PIN2);
IRrecv irrecv3(RECV_PIN3);
decode_results results;
void setup()
{
  Serial.begin(9600);
  pinMode(STBY, OUTPUT);
  pinMode(PWMA, OUTPUT);
  pinMode(AIN1, OUTPUT);
  pinMode(AIN2, OUTPUT);
  pinMode(PWMB, OUTPUT);
  pinMode(BIN1, OUTPUT);
  pinMode(BIN2, OUTPUT);
  pinMode(LED, OUTPUT);
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
  Serial.println("Enabling IRin");
  irrecv1.enableIRIn();
  irrecv2.enableIRIn();
  irrecv3.enableIRIn();
  Serial.println("Enabled IRin");
```

```
  pinMode( hallPin, INPUT );
}
void goForward (int pwm)
{
  digitalWrite (AIN1,HIGH);
  digitalWrite (AIN2,LOW);
  digitalWrite (BIN1,HIGH);
  digitalWrite (BIN2,LOW);
  analogWrite(PWMA,pwm);
  analogWrite(PWMB,pwm);
}

void rotateRight (int pwm)
{
 digitalWrite (AIN1,LOW);
 digitalWrite (AIN2,HIGH);
 digitalWrite (BIN1,LOW);
 digitalWrite (BIN2,HIGH);
 analogWrite(PWMA,pwm);
 analogWrite(PWMB,2*pwm);
}

int ultrason()
{
  int duree, distance;
  digitalWrite(trigPin, LOW);
  delayMicroseconds(2);
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);
  duree = pulseIn(echoPin, HIGH);
  distance = duree*340/(2*10000);
  return(distance);
}
void emetteur()
{

  for (int i = 0; i < 3; i++)
  {
          irsend.sendSony(0xa90, 12);
          delay(40);
  }
  delay(500); //5 second delay between each signal burst
}

void loop()
```

```
{
  emetteur();

  int Dist=ultrason()
  if(Dist!=0 && Dist<200)
  {
          do
          {
          rotateRight(150);
          Dist=ultrason();
          delay(500);
          } while (Dist!=0 && Dist<150);
  }
  else
  {
          goForward(vitesse);
          delay(200);
  }
  while((irrecv1.decode(&results))||(irrecv2.decode(&results))||(irrecv3.decode(&results)))
  {
          goForward(vitesse+10);
          delay(200);
  }
  while(sensorValue==HIGH)
  {
          goForward(vitesse+25);
          delay(200);
  }
```