```
// Define pins for motor driver
const int in1Pin = 7;
const int in2Pin = 4;
const int in3Pin = 9;
const int in4Pin = 8;
const int enA = 5;
const int enB = 6;


// Define pins for ultrasonic sensor
const int trigPin = 13;
const int echoPin = 3;

// Define pins for IR sensor
const int irPin1 = 2;
const int irPin2 = 10;



// Define variables for ultrasonic sensor
long duration;
int distance;
 void forward(){
   digitalWrite(in1Pin, LOW);
   digitalWrite(in2Pin, HIGH);
   digitalWrite(in3Pin, LOW);
   digitalWrite(in4Pin, HIGH);
 }
 void right(){
```

```
  digitalWrite(in1Pin, LOW);
  digitalWrite(in2Pin, HIGH);
  digitalWrite(in3Pin, HIGH);
  digitalWrite(in4Pin, LOW);
}
void left(){
  digitalWrite(in1Pin, HIGH);
  digitalWrite(in2Pin, LOW);
  digitalWrite(in3Pin, LOW);
  digitalWrite(in4Pin, HIGH);
}

void setup() {
 // Initialize motor driver pins
 pinMode(in1Pin,OUTPUT);
 pinMode(in2Pin,OUTPUT);
 pinMode(in3Pin,OUTPUT);
 pinMode(in4Pin,OUTPUT);
 pinMode(enA,OUTPUT);
 pinMode(enB,OUTPUT);


 // Initialize ultrasonic sensor pins
 pinMode(trigPin,OUTPUT);
 pinMode(echoPin,INPUT);

 // Initialize IR sensor pin
 pinMode(irPin1, INPUT);
 pinMode(irPin2, INPUT);
```

```
  // Set initial speed for both motors
  analogWrite(enA, 255);
  analogWrite(enB, 255);

}
void loop() {
  // Read IR sensor input
  int irSensorValue1 = digitalRead(irPin1);
  int irSensorValue2 = digitalRead(irPin2);
if(irSensorValue1==0&&irSensorValue2==0){
forward();
  }
else if(irSensorValue1==1&&irSensorValue2==0){
left();
}
else if(irSensorValue1==0&&irSensorValue2==1){
right();
}
}
```