

# HOW THE CAR MOVES (FORWARD, RIGHT, LEFT)

The movement of the car is controlled by adjusting the motor pin signals based on yaw readings from the MPU6050 sensor.

There are three main functions to move the car:

## 1. Forward Movement:

- The function `moveForward()` sets the right motor (motorR1 and motorR2) and the left motor (motorL1 and motorL2) to rotate forward.
- This makes both wheels rotate in the forward direction, causing the car to move straight ahead

```
void moveForward() {  
    digitalWrite(motorR1, LOW);  
    digitalWrite(motorR2, HIGH);  
    digitalWrite(motorL1, LOW);  
    digitalWrite(motorL2, HIGH);  
}
```

## 2. Right Turn:

- The function `moveRight()` rotates the right motor backward (motorR1, HIGH; motorR2, LOW;) and the left motor forward (motorL1, LOW; motorL2, HIGH;).
- This combination causes the car to pivot to the right as the left motor pushes forward while the right motor moves backward.

```
void moveRight() {  
    digitalWrite(motorR1, HIGH);  
    digitalWrite(motorR2, LOW);  
    digitalWrite(motorL1, LOW);  
    digitalWrite(motorL2, HIGH);  
}
```

## 3. Left Turn:

- The function `moveLeft()` rotates the left motor backward (motorL1, HIGH; motorL2, LOW;) and the right motor forward (motorR1, LOW; motorR2, HIGH;).
- This causes the car to pivot to the left.

```
void moveLeft() {  
    digitalWrite(motorR1, LOW);  
    digitalWrite(motorR2, HIGH);  
    digitalWrite(motorL1, HIGH);  
    digitalWrite(motorL2, LOW);  
}
```