# Basic code:

const int leftSensor = 1;

const int rightSensor = 3;

const int motorA1 = 2;

const int motorA2 = 3;

const int motorB1 = 4;

const int motorB2 = 5;

void setup()

{

pinMode(leftSensor, INPUT);

pinMode(rightSensor, INPUT);

pinMode(motorA1, OUTPUT);

pinMode(motorA2, OUTPUT);

pinMode(motorB1, OUTPUT);

pinMode(motorB2, OUTPUT);

}

void loop()

{

int leftSensorValue = digitalRead(leftSensor);

int rightSensorValue = digitalRead(rightSensor);

if (leftSensorValue == HIGH && rightSensorValue == LOW)

{

turnRight();

}

else if (leftSensorValue == LOW && rightSensorValue == HIGH)

{

turnLeft();

}

else if (leftSensorValue == LOW && rightSensorValue == LOW)

{

moveForward();

}

else

{

stopBot();

}

}

void moveForward()

{

digitalWrite(motorA1, HIGH);

digitalWrite(motorA2, LOW);

digitalWrite(motorB1, HIGH);

digitalWrite(motorB2, LOW);

}

void turnLeft()

{

digitalWrite(motorA1, HIGH);

digitalWrite(motorA2, LOW);

digitalWrite(motorB1, LOW);

digitalWrite(motorB2, LOW);

}

void turnRight()

{

digitalWrite(motorA1, LOW);

digitalWrite(motorA2, LOW);

digitalWrite(motorB1, HIGH);

digitalWrite(motorB2, LOW);

}

void stopBot()

{

digitalWrite(motorA1, LOW);

digitalWrite(motorA2, LOW);

digitalWrite(motorB1, LOW);

digitalWrite(motorB2, LOW);

}