```
/Define
Pins
          int ENA = 3; //Enable Pin of the Right Motor (must be PWM)
          int IN1 = 1; //Control Pin
          int IN2 = 2;
          int ENB = 6; //Enable Pin of the Left Motor (must be PWM)
          int IN3 = 4;
          int IN4 = 5;
          //Speed of the Motors
          #define ENASpeed 100
          #define ENBSpeed 100
          int Sensor1 = 0;
          int Sensor2 = 0;
          int Sensor3 = 0;
          int Sensor4 = 0;
          void setup() {
            pinMode(ENA, OUTPUT);
            pinMode(IN1, OUTPUT);
            pinMode(IN2, OUTPUT);
            pinMode(ENB, OUTPUT);
            pinMode(IN3, OUTPUT);
            pinMode(IN4, OUTPUT);
            pinMode(Sensor1, INPUT);
            pinMode(Sensor2, INPUT);
            pinMode(Sensor3, INPUT);
            pinMode(Sensor4, INPUT);

          }
          void loop(){
            //Use analogWrite to run motor at adjusted speed
            analogWrite(ENA, ENASpeed);
            analogWrite(ENB, ENBSpeed);
            //Read the Sensor if HIGH (BLACK Line) or LOW (WHITE Line)
            Sensor1 = digitalRead(8);
            Sensor2 = digitalRead(9);
            Sensor3 = digitalRead(10);
            Sensor4 = digitalRead(11);
            //Set conditions for FORWARD, LEFT and RIGHT
            if(Sensor4 == HIGH && Sensor3 == HIGH && Sensor2 == LOW && Sensor1 ==
          LOW){
              //Turn LEFT
              //motor A Backward
              digitalWrite(IN1, LOW);
              digitalWrite(IN2, HIGH);
              //motor B Forward
              digitalWrite(IN3, HIGH);
```

```
    digitalWrite(IN4, LOW);
  }
  else if (Sensor4 == LOW && Sensor3 == LOW && Sensor2 == HIGH && Sensor1
== HIGH){
    //Turn RIGHT
    //motor A Forward
    digitalWrite(IN1, HIGH);
    digitalWrite(IN2, LOW);
    //motor B Backward
    digitalWrite(IN3, LOW);
    digitalWrite(IN4, HIGH);
  }
  else{
    //if(Sensor4 == LOW && Sensor3 == HIGH && Sensor2 == HIGH && Sensor1
== LOW
    //FORWARD
    digitalWrite(IN1, LOW);
    digitalWrite(IN2, HIGH);
    digitalWrite(IN3, LOW);
    digitalWrite(IN4, HIGH);
  }
}
```