

## Experiment : 4    DC MOTOR

```
// Define motor control pins

const int motorPin1 = 9;  // IN1 on the motor driver

const int motorPin2 = 10; // IN2 on the motor driver

const int enablePin = 11; // EN1 on the motor driver (optional for speed control)

void setup() {

    // Set motor control pins as outputs

    pinMode(motorPin1, OUTPUT);

    pinMode(motorPin2, OUTPUT);

    pinMode(enablePin, OUTPUT); // Optional for speed control

    // Set enable pin to HIGH for full speed (if used)

    digitalWrite(enablePin, HIGH); // Set to LOW for no power to the motor

}

void loop() {

    // Spin motor in one direction

    digitalWrite(motorPin1, HIGH);

    digitalWrite(motorPin2, LOW);

    // Keep motor spinning for 5 seconds

    delay(5000);

    // Stop the motor

    digitalWrite(motorPin1, LOW);

    digitalWrite(motorPin2, LOW);

    // Keep motor stopped for 2 seconds

    delay(2000);

}
```