



**WIZnet** Academy 2017

# 아두이노 선풍기 만들기



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# Think About

»» 선풍기? 뭐가 필요할까





모터(Moter)란?

# 모터는 심장!

## » 모터의 활용 예시





회로를 구성해보자!

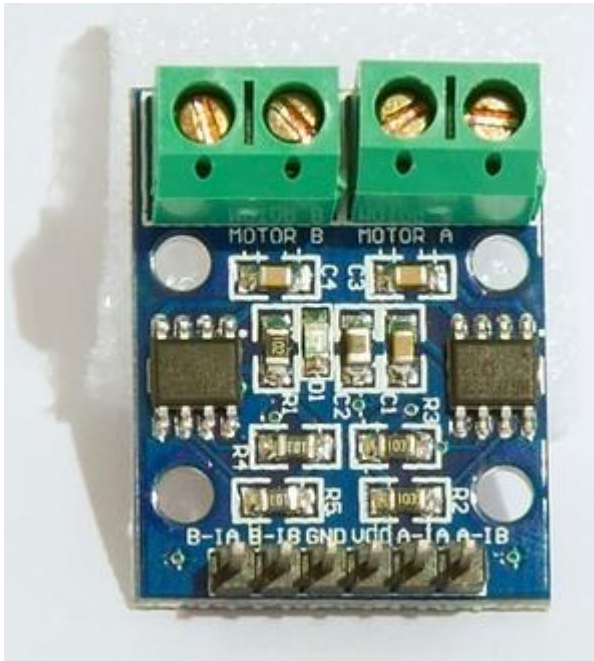
# 준비물

## >> 준비물 리스트

				
1.아두이노	2.전원케이블	3.모터드라이버	4.모터	5.점퍼와이어

# 준비물

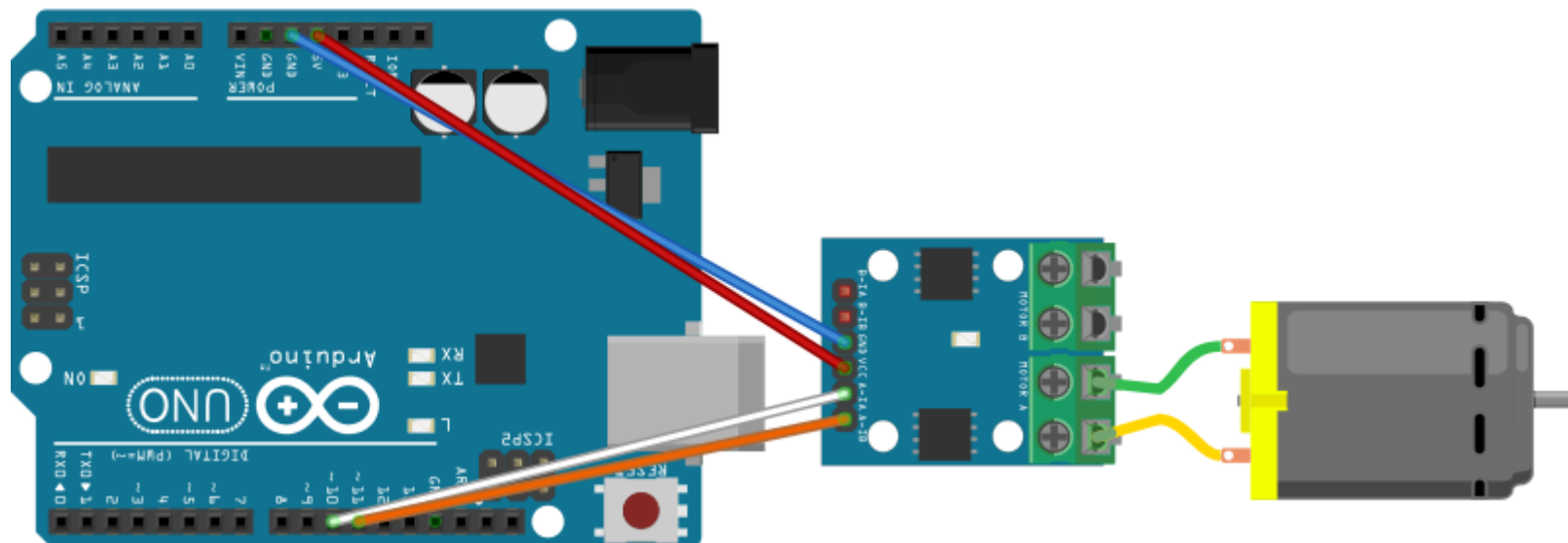
## »» 모터드라이버



1. 모터를 구동하는데, 필요한 정도의 전원을 공급해준다.
2. 모터를 구동하는데, 필요한 전압 레벨을 맞춰준다.

# 회로를 구성해보자

## » 회로 구성

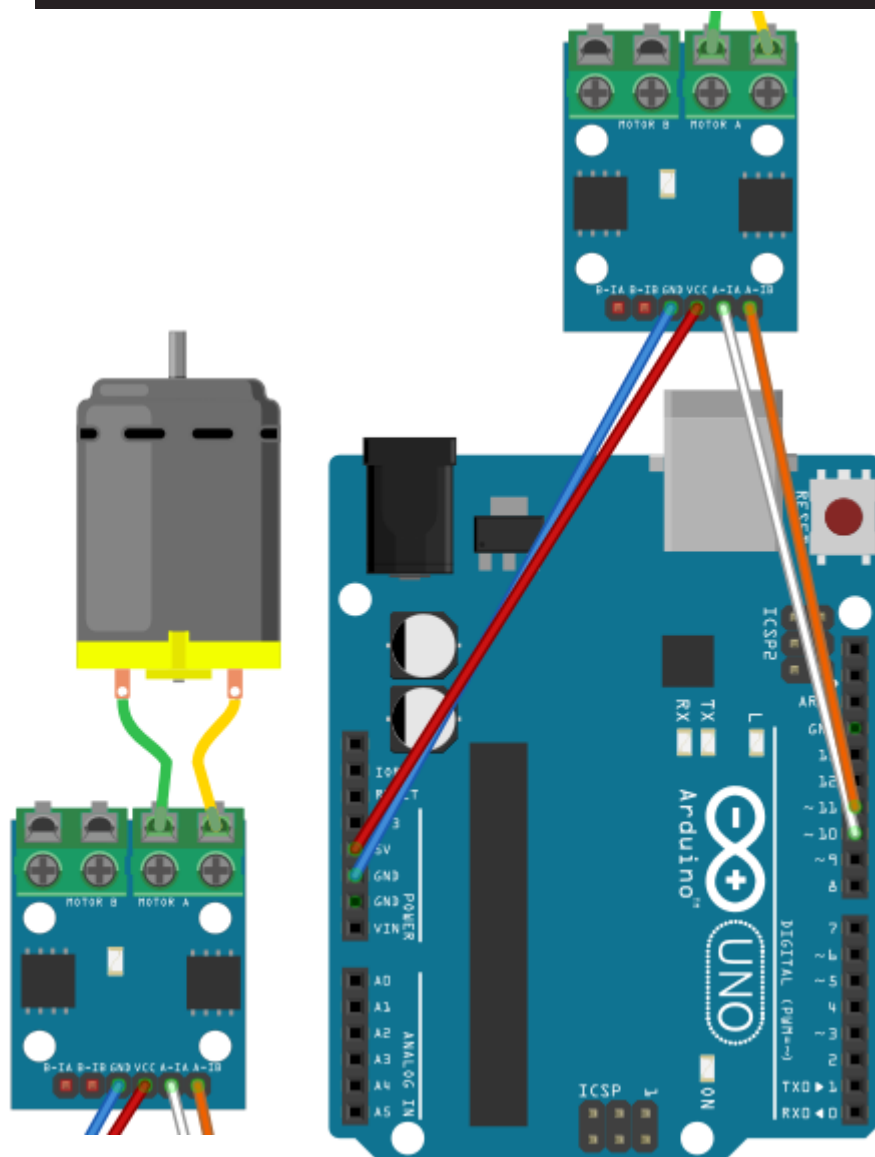






모터를 구동해보자!

# 모터 제어



```

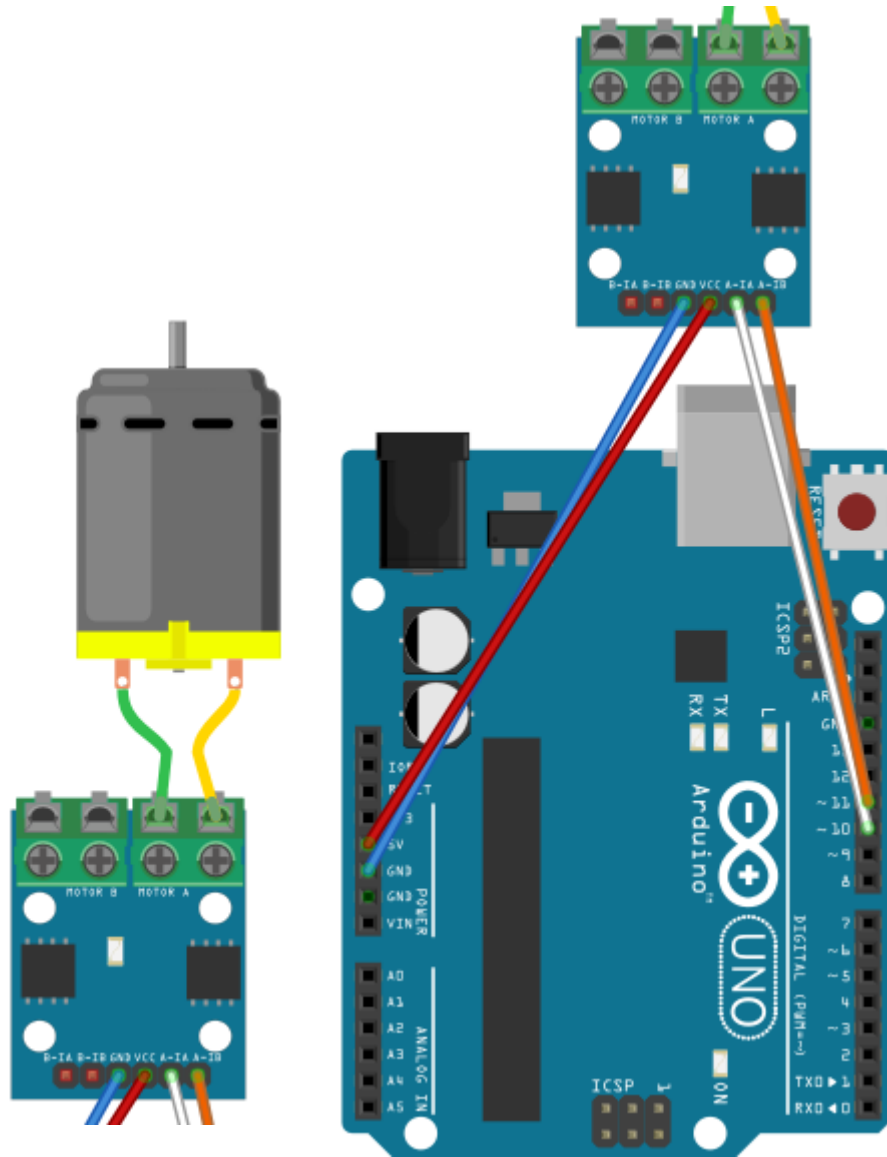
1 #define motorA 10
2 #define motorB 11
3
4 void setup() {
5     // put your setup code here, to run once:
6
7     pinMode(motorA, OUTPUT);
8     pinMode(motorB, OUTPUT);
9
10 }
11
12 void loop() {
13     // put your main code here, to run repeatedly:
14
15     digitalWrite(motorA, HIGH);
16     digitalWrite(motorB, LOW);
17     delay(1000);
18
19     digitalWrite(motorA, LOW);
20     digitalWrite(motorB, LOW);
21     delay(1000);
22
23     digitalWrite(motorA, LOW);
24     digitalWrite(motorB, HIGH);
25     delay(1000);
26
27     digitalWrite(motorA, HIGH);
28     digitalWrite(motorB, HIGH);
29     delay(1000);
30 }

```



선풍기를 만들어보자.

# 선풍기처럼 만들어보자



```

1 #define motorA 10
2 #define motorB 11
3
4 void setup() {
5     // put your setup code here, to run once:
6
7     pinMode(motorA, OUTPUT);
8     pinMode(motorB, OUTPUT);
9
10 }
11
12 void loop() {
13     // put your main code here, to run repeatedly:
14
15     analogWrite(motorA, 255);
16     analogWrite(motorB, 0);
17     delay(2000);
18
19     analogWrite(motorA, 0);
20     analogWrite(motorB, 0);
21     delay(2000);
22
23     analogWrite(motorA, 0);
24     analogWrite(motorB, 120);
25     delay(2000);
26
27     analogWrite(motorA, 255);
28     analogWrite(motorB, 255);
29     delay(2000);
30 }

```

# Think About

»» 더 생각해보자.



- 모터를 두 개를 돌려보자.
- 실제 선풍기처럼 강약 조절을 하려면?



Thank you