9/20/16

ARDUINO CODE → ROBOT MOVEMENT

```
VOID LOOP() {
    IF (BT.AVAILABLE() > 0) {
    COMMAND = BT.READ();
    SERIAL.PRINTLN(BT.READ());
    DELAY(50);
    SWITCH(COMMAND) {
        CASE '1':
            FORWARD();
            BREAK;
        CASE '0':
            FREEZE();
            BREAK;
        CASE '2':
            REVERSE();
            BREAK;
        CASE '3':
            LEFT();
            BREAK;
        CASE '4':
            RIGHT();
            BREAK;
                }
                }
                }
```

INCLUDE SOFTWARE

DEFINE PINS

↓

MOTOR A1 →

MOTOR A2 →

MOTOR B1 →

MOTOR B2 →

MOTOR C1 →

MOTOR C2 →

MOTOR D1 →

MOTOR D2 →

(DIGITALWRITE)

```
VOID LEFT()
    (A1, HIGH);
    (A2, LOW);
    (B1, LOW);
    (B2, HIGH);
    (C1, HIGH);
    (C2, LOW);
    (D1, LOW);
    (D2, HIGH);
VOID RIGHT()
    (A1, LOW);
    (A2, HIGH);
    (B1, HIGH);
    (B2, LOW);
    (C1, LOW);
    (C2, HIGH);
    (D1, HIGH);
    (D2, LOW);
```

```
VOID FORWARD()
    (A1, HIGH);
    (A2, LOW);
    (B1, HIGH);
    (B2, LOW);
    (C1, HIGH);
    (C2, LOW);
    (D1, HIGH);
    (D2, LOW);
VOID REVERSE()
    (A1, LOW);
    (A2, HIGH);
    (B1, LOW);
    (B2, HIGH);
    (C1, LOW);
    (C2, HIGH);
    (D1, LOW);
    (D2, HIGH);
```

```
VOID FREEZE()
    (A1, LOW);
    (A2, LOW);
    (B1, LOW);
```

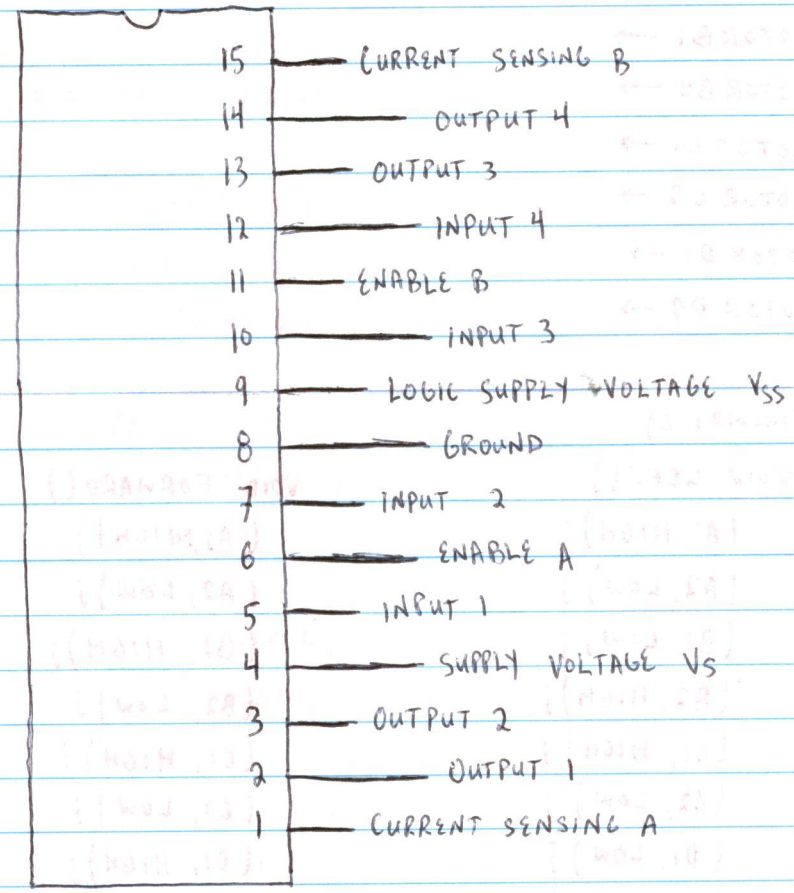
↓

```
    (D2, LOW);
```

9/22/16

MOTOR DRIVER

L298N



7805 VOLTAGE REGULATOR →