

3.6 Understanding basic robot movement

3.6.1 Tasks: Make robot move

1. Connect both DC motors to RobDuino controller according to tbl. 1:

Table 1: Motors connections to RobDuino Output pins.

MOTOR	RobDuino Output pins
Left DC Motor - con. A	D7
Left DC Motor - con. B	D6
Right DC Motor - con. A	D5
Right DC Motor - con. B	D4

2. Write simple programming instructions to move the robot forward. Make right sequence of programming instructions (e.g. `digitalWrite()` and `delay(time_in_ms)` functions) to achieve:
 1. move the robot forward,
 2. do it for 3000 ms and
 3. stop the robot.

3.6.2 Questions:

You probably ended up with something like prog. 1:

Program 1: First moves.

```
1  void setup()
2  {
3      pinMode(4, OUTPUT);
4      pinMode(5, OUTPUT);
5      pinMode(6, OUTPUT);
6      pinMode(7, OUTPUT);
7
8      digitalWrite(7, HIGH);
9      digitalWrite(6, LOW);
10     digitalWrite(5, HIGH);
11     digitalWrite(4, LOW);
12
13     delay(3000);
14
15     digitalWrite(7, LOW);
16     digitalWrite(6, LOW);
17     digitalWrite(5, LOW);
18     digitalWrite(4, LOW);
19 }
20
21 void loop()
22 {
23
24 }
```

1. Is this code “easy readable”?
2. Why is readable code important?

3.6.3 Summary:**3.6.3.1 <++>****3.6.4 Issues:****3.6.4.1 <++>**