

Programming Challenge

Simulated Acceleration

Challenge Description

Simulate acceleration by having the robot move at $\frac{1}{4}$ power for 1 second, followed by $\frac{1}{2}$ power for 1 second, then $\frac{3}{4}$ power for 1 second, and finally full power for 1 second before stopping.

Fill in the following table using the actual ROBOTC values:

Full Power	3/4 Power	1/2 Power	1/4 Power

Describe what the following ROBOTC Commands do:

<code>motor[port3] = 31;</code>	
<code>wait1Msec(4000);</code>	

Write your code in the space below, use the back of the paper if you need to. Use the pseudocode outline on the right to structure your code. Once you finish, download and run the code on your real robot.

```
task main()
{
```

```
}
```

Pseudocode

1. Motors forward @ 1/4 power
2. Wait 1 second
3. Motors forward @ 1/2 power
4. Wait 1 second
5. Motors forward @ 3/4 power
6. Wait 1 second
7. Motors forward @ full power
8. Wait 1 second