

## CODE TO NOTE

### PARSING STRINGS:

```
Serial.readStringUntil(' ');
```

Reads a serial message until the first space and saves it as a string.

### STRING TO INT:

```
string_name.toInt();
```

If a number is stored in a string variable, this will convert it to an integer, which can be used in math equations.

## FUNCTIONS TO NOTE

```
rightMotor(motor_distance);
```

Drive the right motor long enough to travel the specified distance.

```
leftMotor(motor_distance);
```

Drive the left motor long enough to travel the specified distance.

## CODING CHALLENGES

**READ MORE COMMANDS:** Add code to the sketch that takes not only direction but also distance. The two should be separated by a character the code can parse out and know where the next value begins.

**ADD MORE COMMANDS:** This sketch only uses four of the many ASCII characters. Use different keys to move the robot in different ways or have commands turn on LEDs.

## TROUBLESHOOTING

### Motor not spinning

Check the wiring to the motor driver. There are a lot of connections, and it's easy to mix one of them up with another. If only one motor is working, check the wires coming from the nonworking motor. Make sure they have not come loose from the motor.

### Switch not working

Make sure that you are hooked up to the middle pin and one side pin on the switch.