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/* 03/24/2017
*
* Using the Gobbbit robot with line sensor on a course with multiple turns
* between a start and end point...
*
* The program will...
*
* 1) Use the drive() function to navigate from the start to the end point.
* 2) Turn around at the end.
* 3) Use the drive() function to navigate back to the start point.
* 4) Stop and do nothing else.
*
* *** Change the use of the drive() steps to fit your course. ***
*
* How the drive() function works...
* Calling drive('L/R/F/S/U') will start driving/following the line and continue following until it
* is able to complete the requested direction/turn at the next found intersection
* or end. If it cannot make the requested direction/turn, it will spin around fast
* to indicate it had a problem, and stop the robot.
* Turn direction values are ('L')eft, ('R')ight, ('F')orward, ('S')top, or ('U')turn.
*
* To see a video using this sketch: https://youtu.be/c2BB-Bc95Ik
*
*/

// If the Adafruit motor shield v2.3 is to be used...
// M1 and M2 terminals will be used. Right motor on M1, Left on M2.
// Uncomment the next line if you are using the Adafruit shield
// #define ADAFRUIT_MS

#include <GobbbitLineCommand.h>

// Give your robot a name.
// I called it "MyBot" here, but you call it whatever you want.
// If you make a new name, make sure to find/replace all of the "MyBot" in the sketch with your new
name.
GobbbitLineCommand MyBot;

void setup() {

  MyBot.beginGobbbit();

  MyBot.calibrateLineSensor(0);

}

void loop() {

```

```
// Use the drive() function to drive from the start to the end of the course
// Note: You could use a for() loop to easily repeat drive() statements.
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');

// at the end, turn around
MyBot.drive('U');

// Use the drive() function to drive back to your start point
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');
MyBot.drive('F');

// back at the start, stop the robot
MyBot.drive('S');

// Do nothing else forever or it will repeat all your commands again
while(1);

}
```