Using the Gobbit 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-Bc95lk

// 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 <GobbitLineCommand.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.
GobbitLineCommand MyBot;

void setup() {

    MyBot.beginGobbit();
    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');
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');
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);
}
}