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**Lab 2**

**Objective**

Have the robot preform a square as perfectly as it can. Repeat the process multiple times to show a trend that the code is successful.

**Results**

Each test showed that the robot had a nice path that it followed only being slightly different at the end.

Video Link - <https://share.icloud.com/photos/09b7fFFhvMTrqqh1pSFVL7muA>

**Result 1**

A picture containing floor

Description automatically generatedA picture containing floor

Description automatically generated

For all the results this was the best case out of all of them. The tape almost ended up on top right wheel which is exactly where I wanted it to land. It was only 1 inch from the tape. After this happened I was confident I could repeat these results.

**Result 2**

A picture containing building, floor

Description automatically generatedA picture containing building, floor

Description automatically generated

This was definitely the worst of the tests, the tape ended up being near the back of the robot. After I measured it came out to about 3 in away from the tape. Overall though, I still can not complain as the robot is stopping on the tape which is successful.

**Result 3**

**A close-up of a wood floor

Description automatically generated with low confidenceA picture containing floor, building

Description automatically generated**

The final test was really promising and almost as good as the original test that was conducted. It was a great way to end the results and really showed that this program was the best I could get it.

|  |  |
| --- | --- |
| Trail Number | Distance From Tape (Max / Min) Inches |
| Trail 1 | 1 in |
| Trail 2 | 3 in |

**Conclusion**

The program was a complete success, and it was achieved in a considerable amount of time. Of course, the results will never be the same each time but, if they are producing almost perfect scenarios each time the program shows great results.