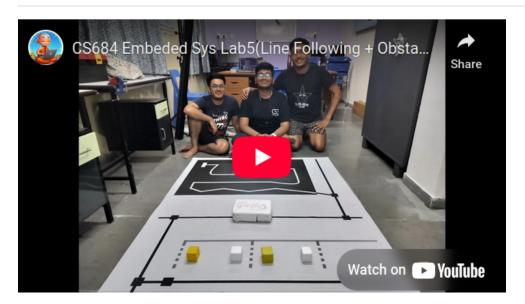# CS684 :: Lab 5 : Heptagon implementation for Line Switching and Obstacle Navigation

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YouTube [Link]

Timestamps

- 00:00 - Code explenation
- 05:10 - Calibration
- 05:22 - Idle
- 05:25 - Start
- 05:26 - White Line Following
- 05:50 - Line Switch
- 05:51 - Black Line Following
- 05:56 - Obstacle Navigation
- 06:09 - Black Line Following
- 06:14 - Parking
- 06:19 - Finish

Performance

- **Calibration:** 10s
- **Total time taken:** 53s
  - **WLF:** 24s
  - **Line Switch:** 1s
  - **BLF (part1):** 5s
  - **Obstacle Navigation:** 13s (includes wate time)
  - **BLF (part2):** 5s
  - **Parking :** 5s

Charge Requirement

- All these motions are tuned for a full battery charge. At lower charge levels, reduced motor power affects speed and accuracy, impacting turns and navigation.