B00060572 (Dave Kelly)

B00058876 (Alan Leech)

B00063317 (Josh Kilbride)

B00060176 (David Malone)

Task 1:

To make Otto turn left you must make him turn right three times. In practice you would check if there is anything straight ahead, it there is you turn right, if there isn't you take a step. After you have turned right, you check again, if there is nothing there you take a step, if there is a wall there you must turn twice making that a total of three right turns to go left.
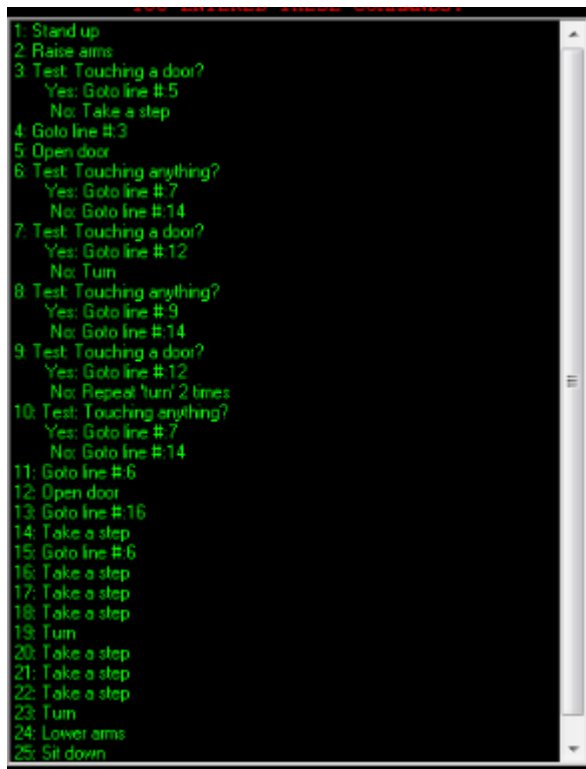
Task 2:

1: Stand up
2: Repeat "take step" 2 times
3: Raise arms
4: Test: Touching door?
      Yes: Open door
      No: Take step
5: Repeat "turn" 2 times
6: Repeat "take step" 3 times
7: Repeat "turn" 2 times
8: Lower arms
9: Sit down
10: Stop

Task 3:

For the two door maze we had otto search for a door and take a step if there was no door until he found the first door. After otto found the door he opened it and then began to solve the maze. To solve the maze we had otto check if anything was in front of him and if there wasn't he would take a step and check again, if there was something in front of him otto would check if it was a door and if it wasn't he would turn. If there was a door in front of otto he would open it, leave the maze and return to his docking station. If otto had turn and found no door he would check for a wall, if there was no wall he would take a step and start over on his checks, if there was a wall he would turn twice, skipping the way he came from and check for a door and then a wall again. Otto continued to check for a wall and door every step until he reached the door at the end of the maze. When Otto reached the last door he opened it, left the maze and returned to his docking station.

Commands:


```
YOU ENTERED THESE COMMANDS:
1: Stand up
2: Raise arms
3: Test: Touching a door?
      Yes: Goto line #:5
      No: Take a step
4: Goto line #:3
5: Open door
6: Test: Touching anything?
      Yes: Goto line #:7
      No: Goto line #:14
7: Test: Touching a door?
      Yes: Goto line #:12
      No: Turn
8: Test: Touching anything?
      Yes: Goto line #:9
      No: Goto line #:14
9: Test: Touching a door?
      Yes: Goto line #:12
      No: Repeat 'turn' 2 times
10: Test: Touching anything?
      Yes: Goto line #:7
      No: Goto line #:14
11: Goto line #:6
12: Open door
13: Goto line #:16
14: Take a step
15: Goto line #:6
16: Take a step
17: Take a step
18: Take a step
19: Turn
20: Take a step
21: Take a step
22: Take a step
23: Turn
24: Lower arms
25: Sit down
```

Task 4:

For task 4 we started with the same commands as task 3 as they are similar, we took a few commands off the very end and it seemed to work.

Commands: See next page.

Commands:

```
1: Stand up
2: Raise arms
3: Test: Touching a door?
      Yes: Goto line #:5
       No: Take a step
4: Goto line #:3
5: Open door
6: Test: Touching anything?
      Yes: Goto line #:7
       No: Goto line #:14
7: Test: Touching a door?
      Yes: Goto line #:12
       No: Repeat 'turn' 2 times
8: Test: Touching anything?
      Yes: Goto line #:9
       No: Goto line #:14
9: Test: Touching a door?
      Yes: Goto line #:12
       No: Repeat 'turn' 2 times
10: Test: Touching anything?
      Yes: Goto line #:7
       No: Goto line #:14
11: Goto line #:6
12: Open door
13: Goto line #:16
14: Take a step
15: Goto line #:6
16: Take a step
17: Take a step
18: Take a step
19: Repeat 'turn' 2 times
20: Lower arms
21: Sit down
22: Stop
```

Task 5:

Our video can be found here: http://www.youtube.com/bluerageon