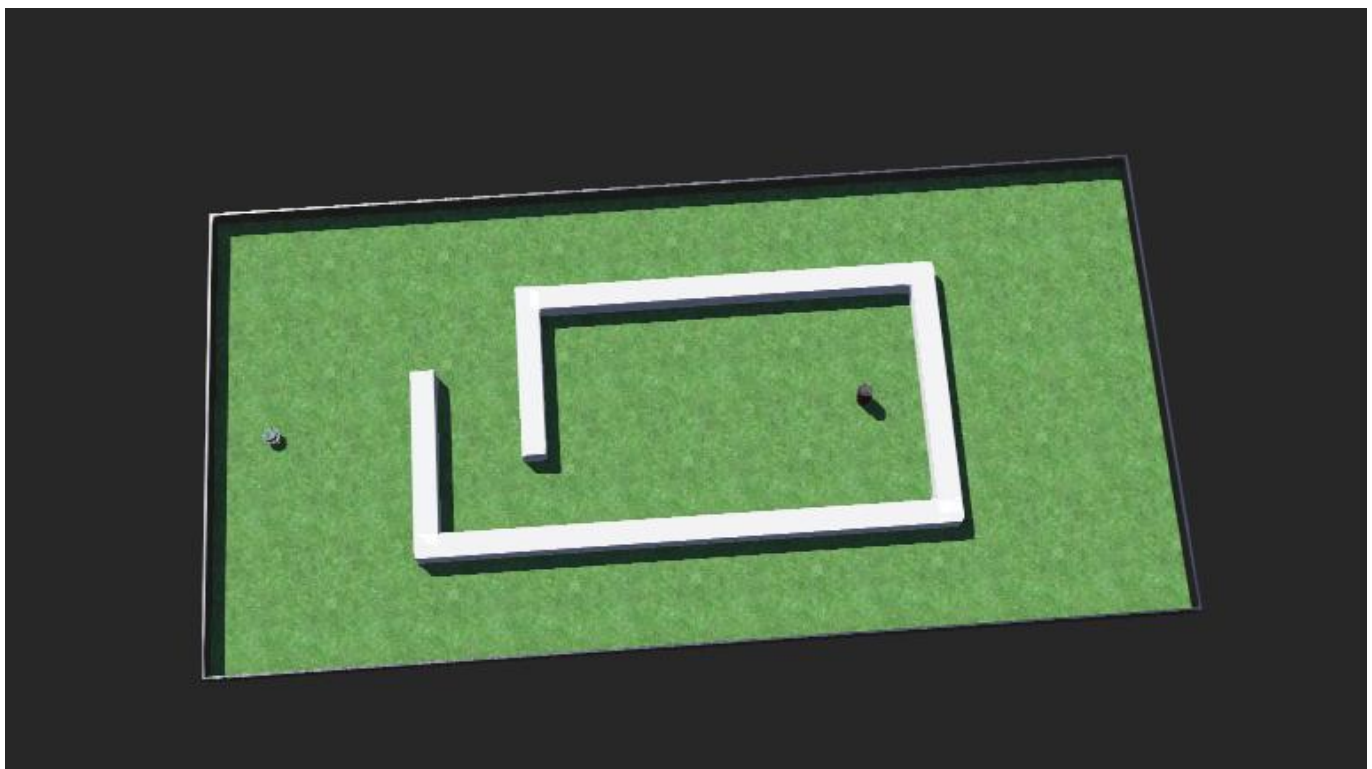# REPORT

Sushil Vemuri 19317
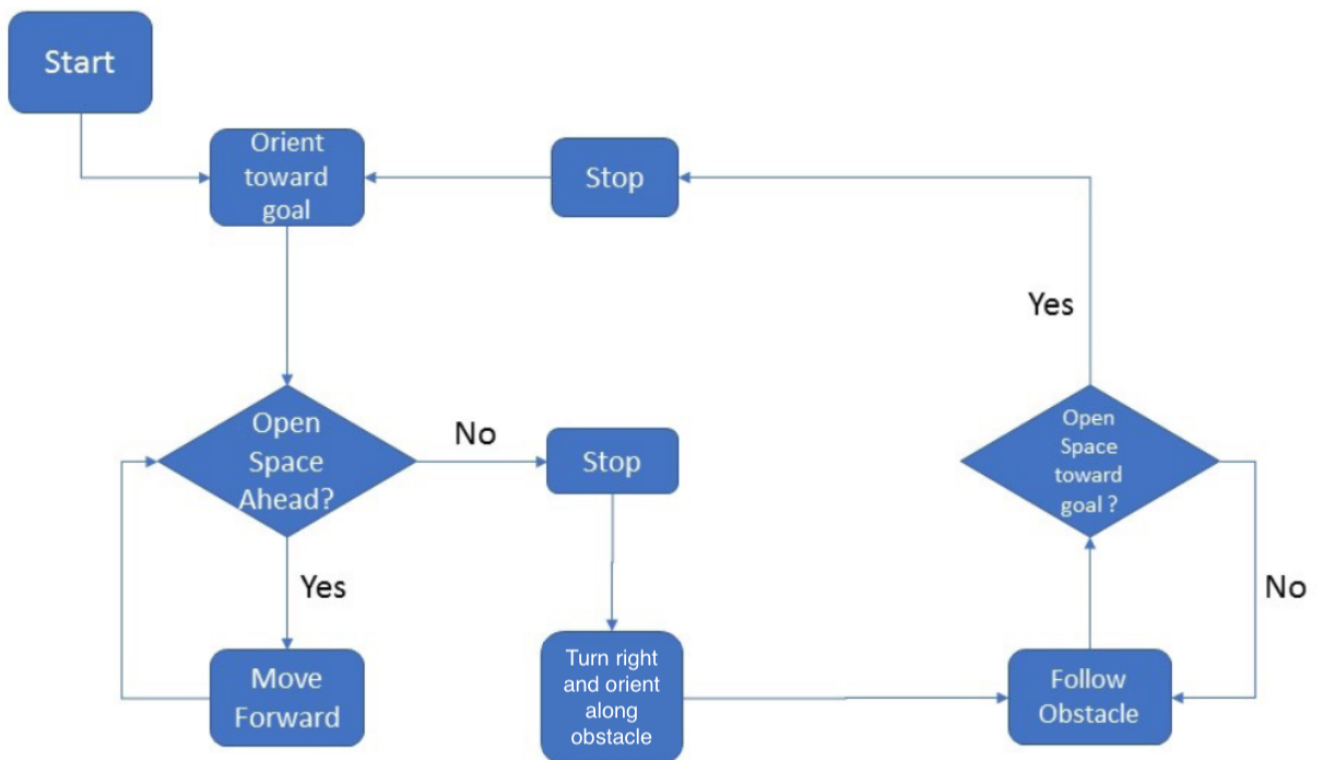
Worked with Sumit, Anudeep, Dishant

Q1

Implemented all required fuction using sympy in main.ipynb
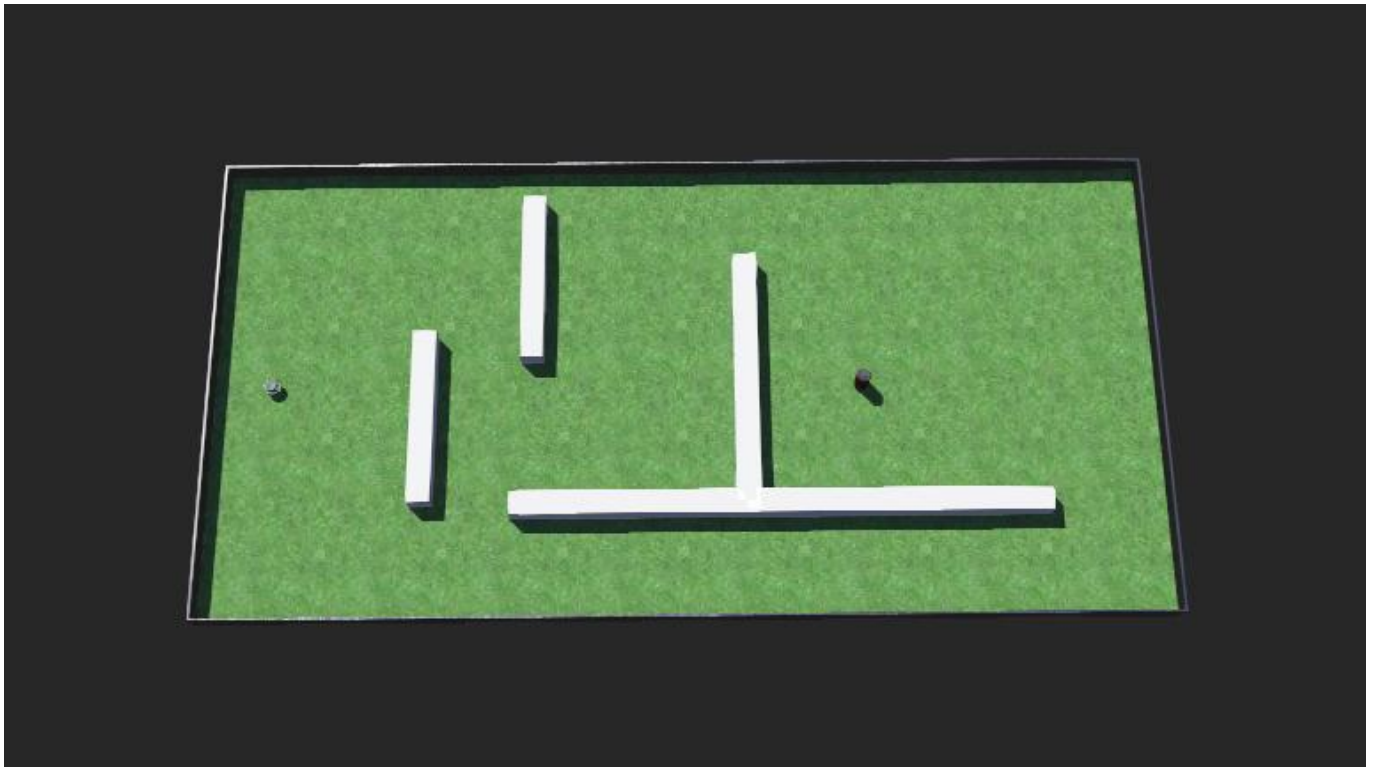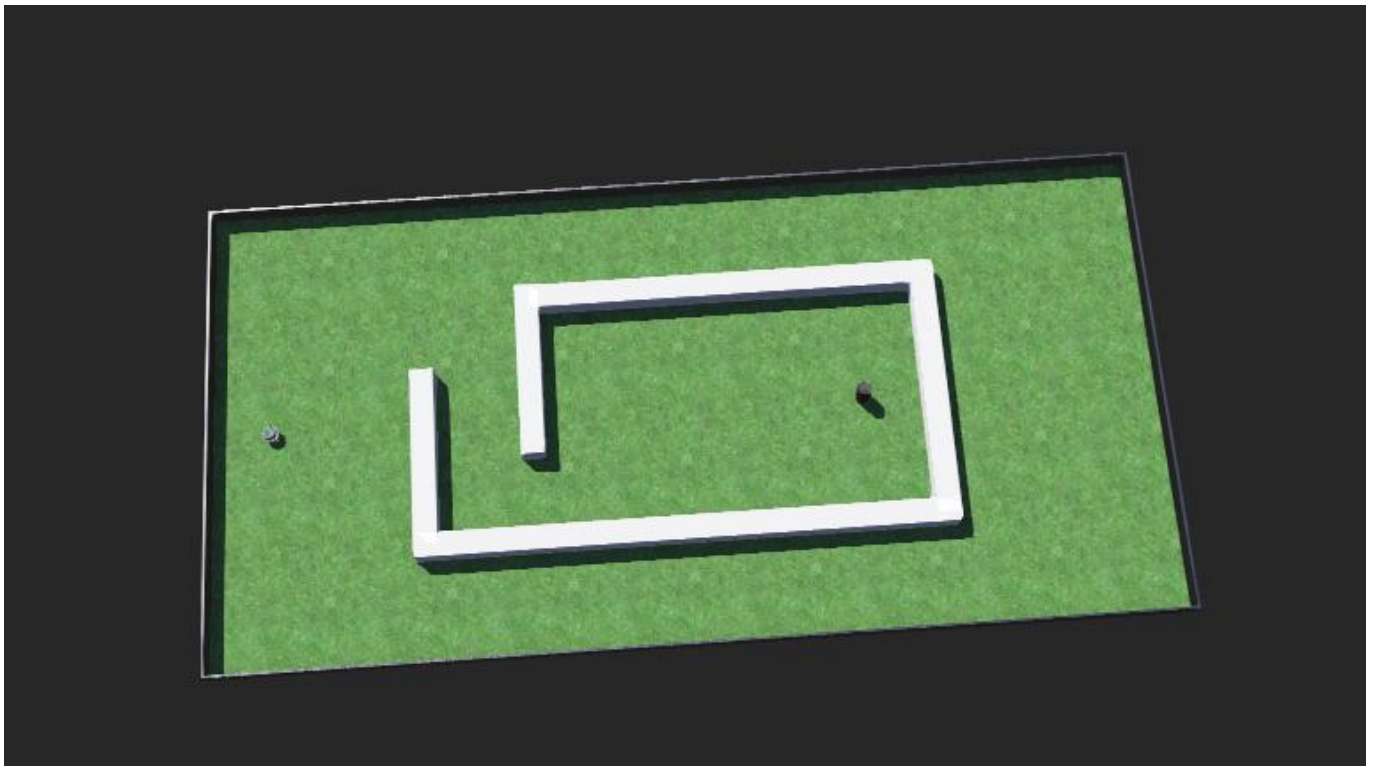
Q2

Q3

Q4

1. An algorithm is complete if, in finite time, it finds a path if such a path exists or terminates with failure if it does not.
2. As we can see from the example given in Q2, Bug0 does not find the path to target even though it exists.
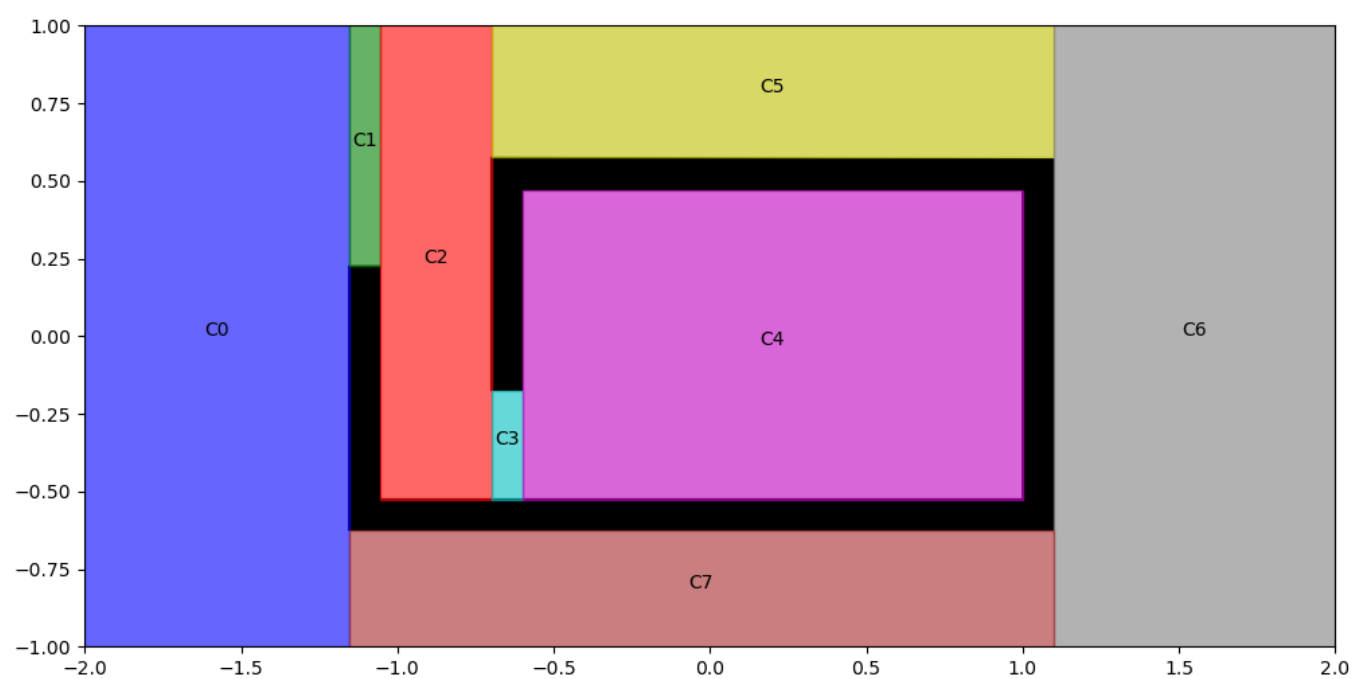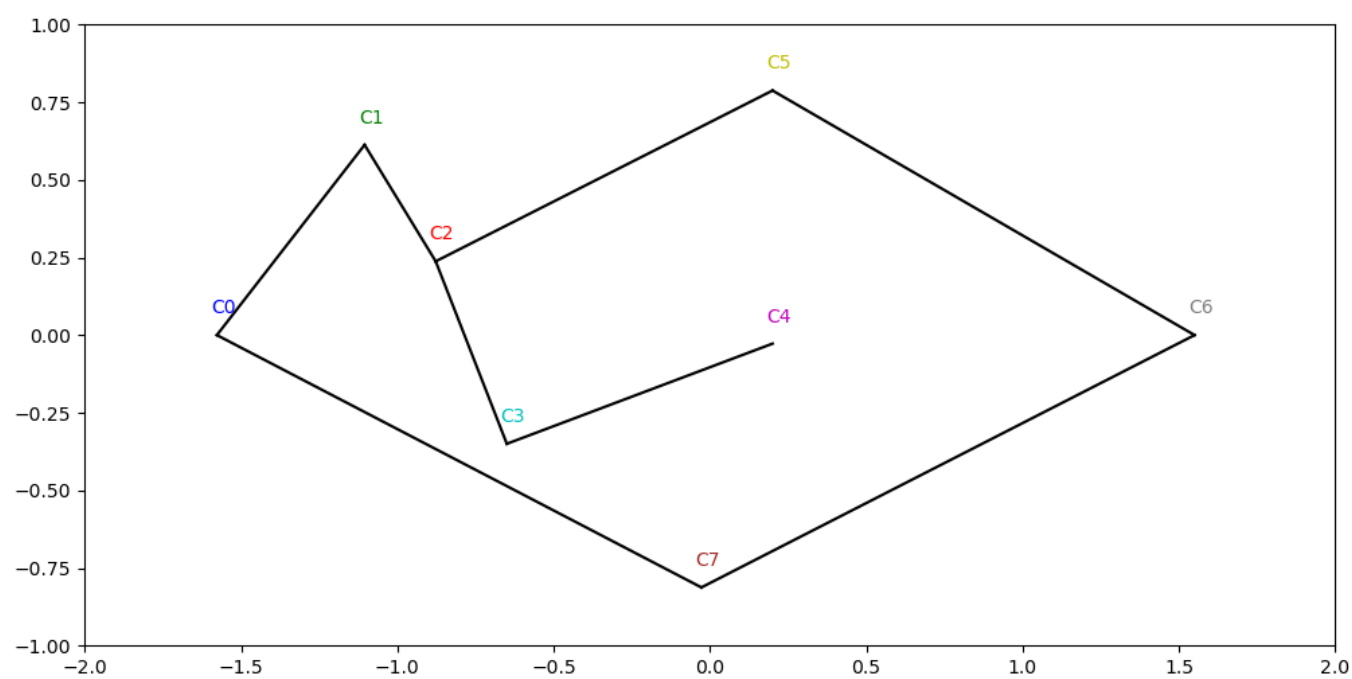3. Therefore Bug0 is incomplete.

Q5

Q6

Q7

Trapezoidal Decomposition

Reeb Graph

Q8

Lawn Mower Pattern