

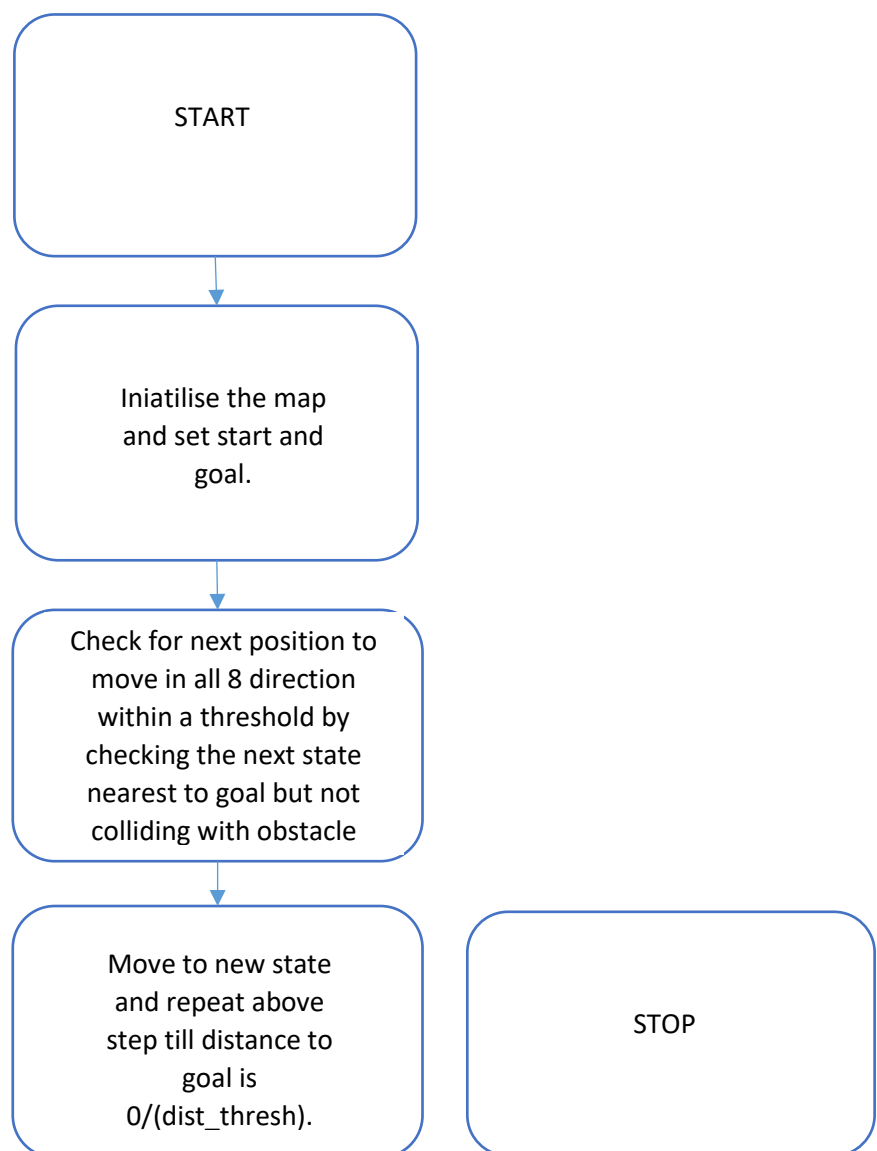
# HOMEWORK – 1 REPORT

## Submissions:

I have attached in the zip folder named Janani\_Mohan\_HW1.zip, the following files:-

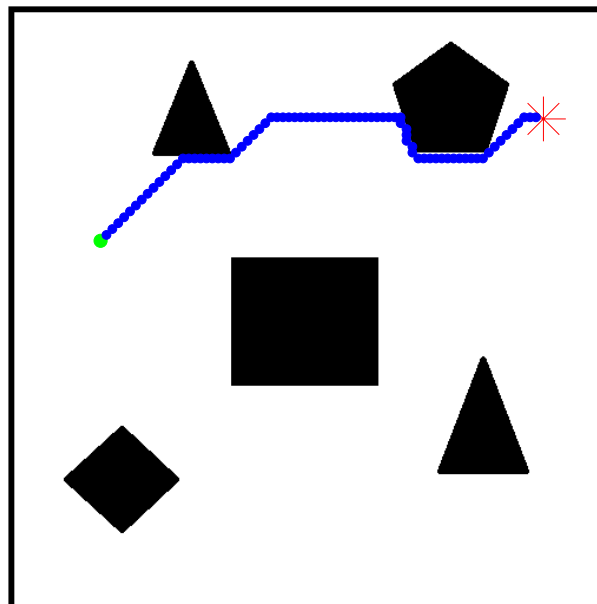
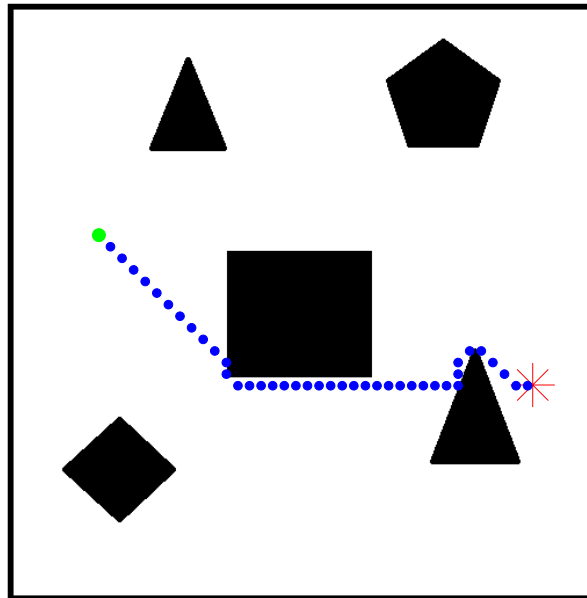
1. simple\_reactive\_nav\_gui.m and simple\_reactive\_nav\_gui.fig file
2. SRN\_ARN1\_HW1.avi video file.

## ALGORITHM:

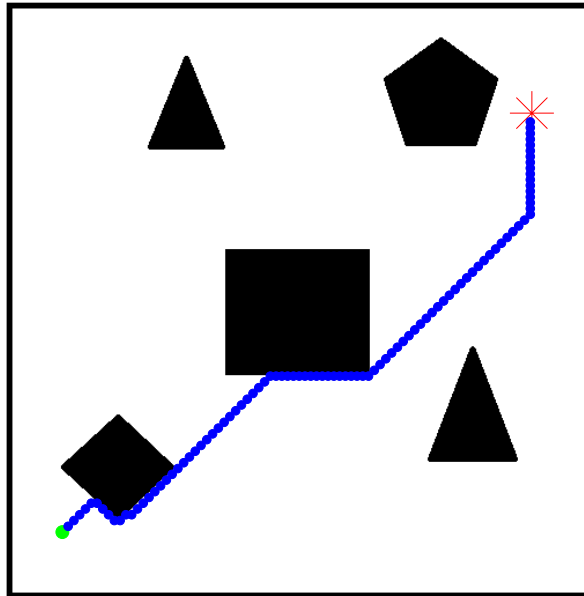


## ACUTE ANGLE OBSTACLES:

The robot currently moves bypassing the acute angle obstacle because of larger step size. For smaller step size, the robot is caught in an infinite loop since it is not able to choose the next state that is nearer to the goal and moves back in a three-loop state. In most of the acute angles cases as listed below, the robot moves to goal bypassing the acute angle obstacle. Green – Start , Red - Goal



Step size = 5



Step size =7

