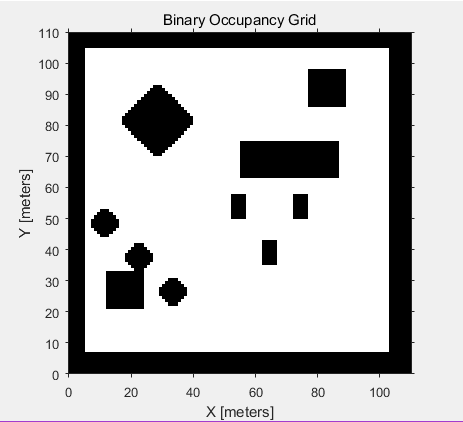
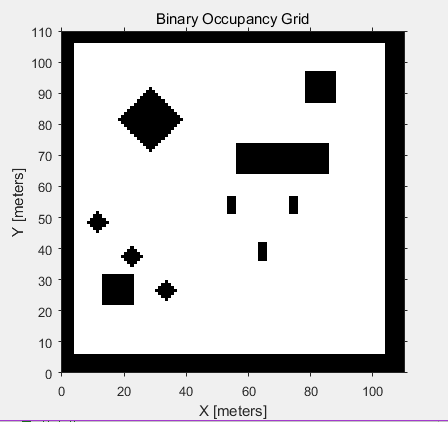
**Chapter 1 introduction**

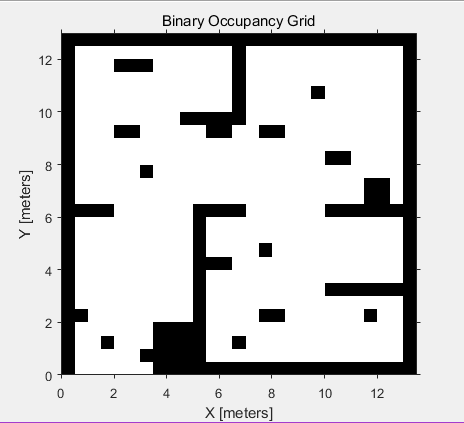
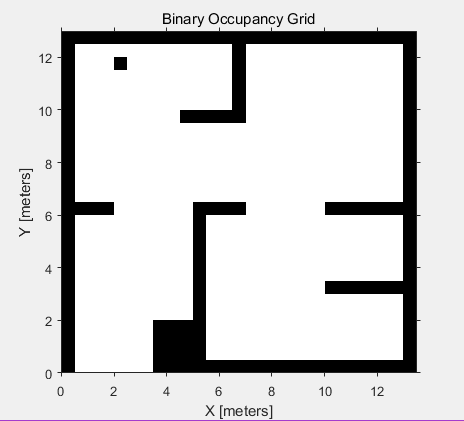
1. path planning & obstacle avoidance

**Chapter 2 Method**

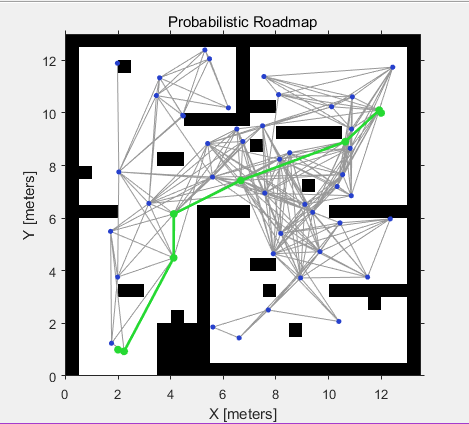
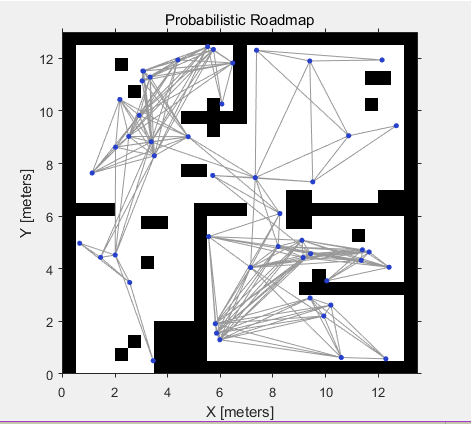
1. static environment
   1. create my own map
      1. inflate map

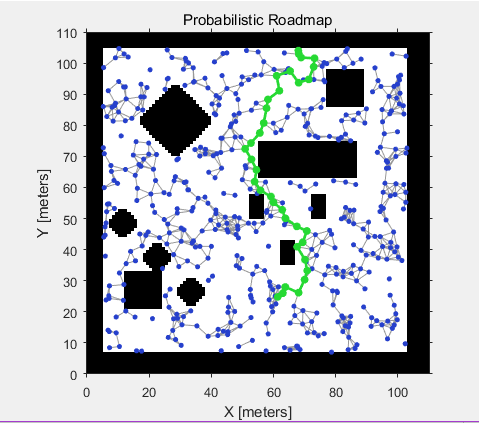


2.1.2 creat random obstacles



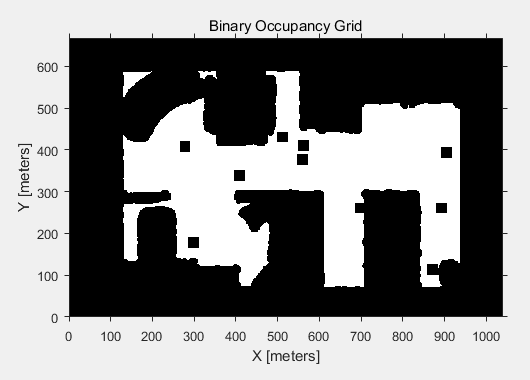
2.1.3 find the shortes path by using PRM

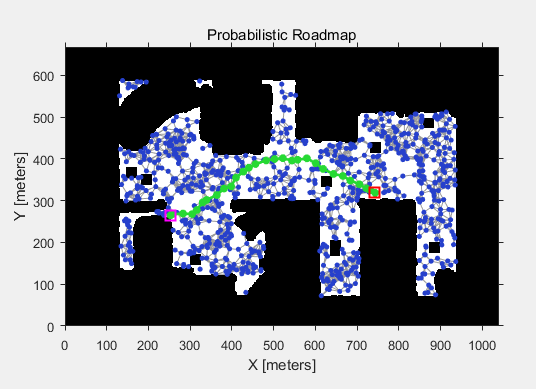
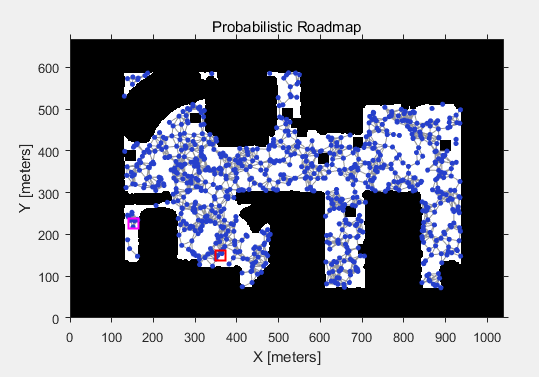




2.2 read image map

2.2.1 inflate map



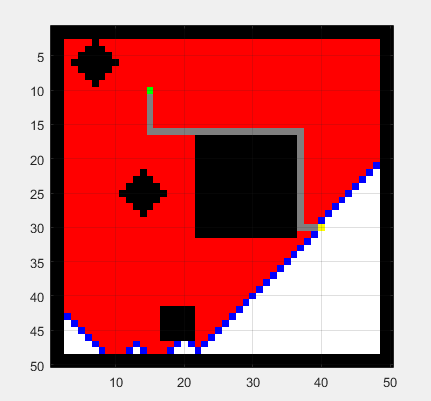
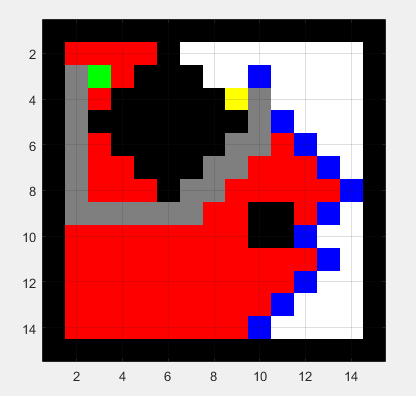
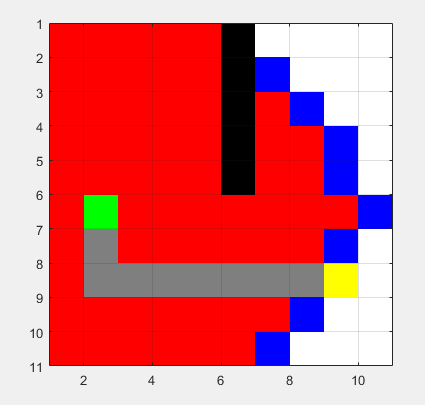


2.3 detect obstacles

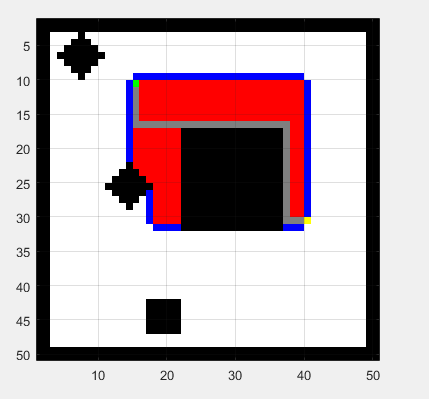
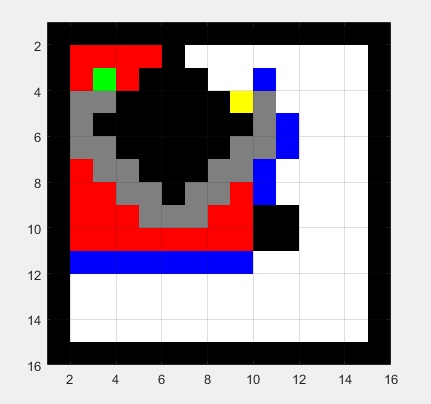
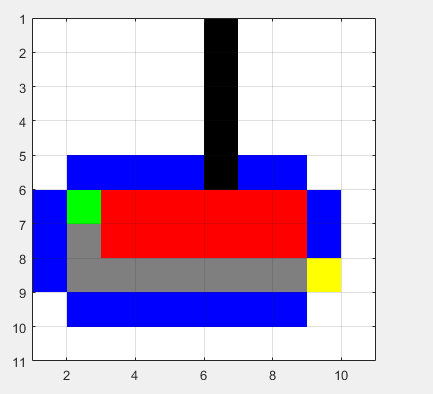
2.4 search shortest path

2.4.1 Prm

2.4.2 Dij

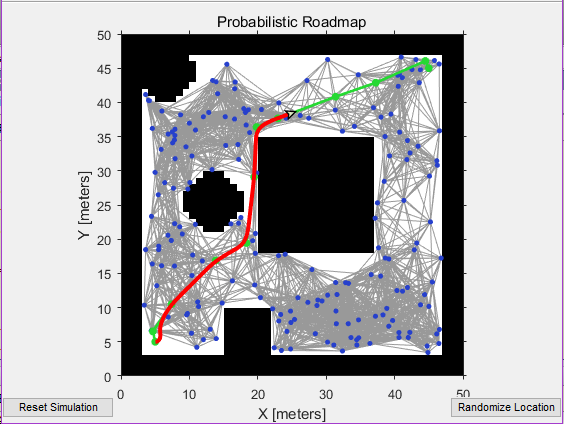
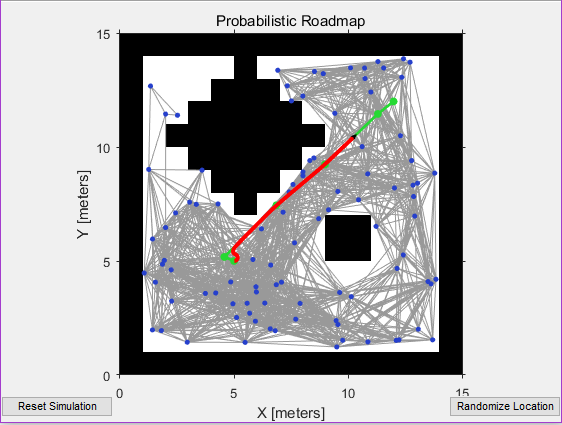


2.4.2 A star



2.4.4should be D star

2.5 path following



1. dynamic environment

Chapter3 experiment & result

3.1Maps

3.2 show some result