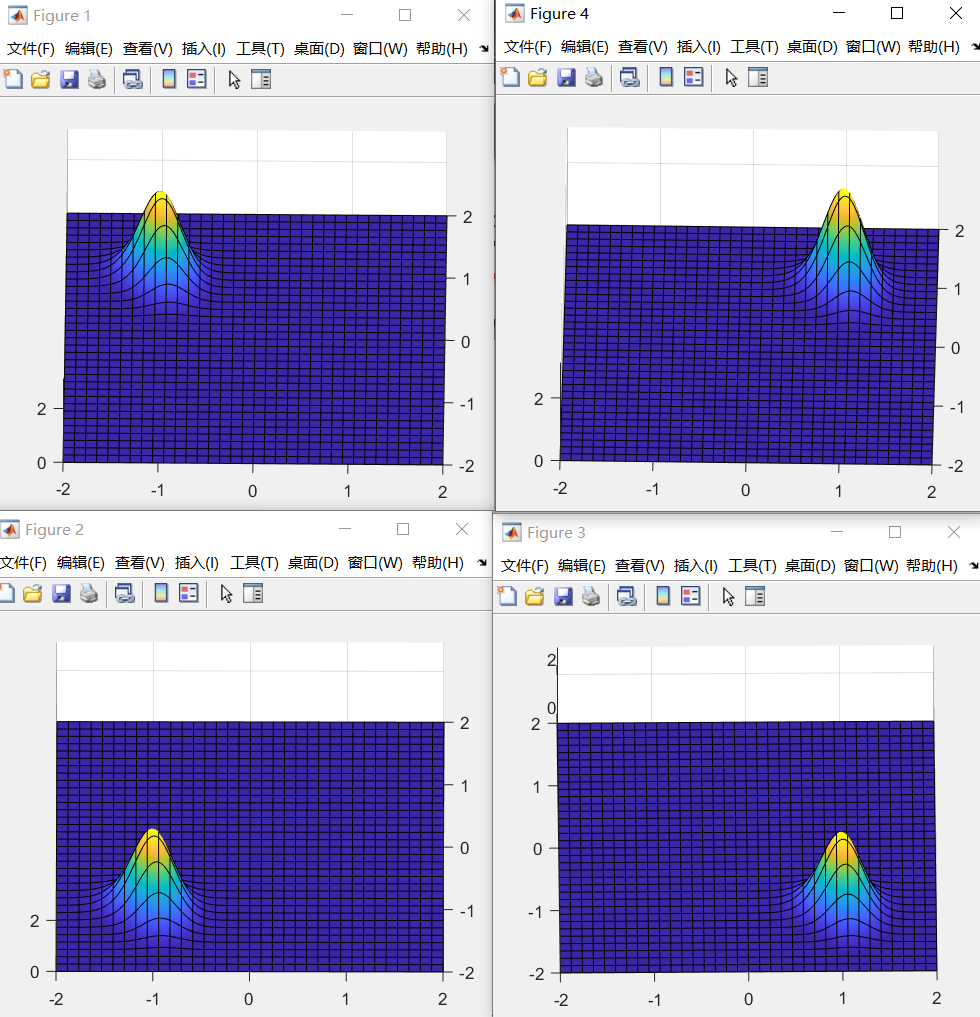
Hw9 11612126 Keming Li Intelligent Robotic

## Problem 1

**Gauss probability result**



**explanations**

**To find a**

range1=max([abs(r1-r2),

abs(r2-r3),

abs(r3-r4),

abs(r4-r1)]); %c>a+b

range2=min([abs(r1+r2),

abs(r2+r3),

abs(r3+r4),

abs(r4+r1)]);%c<a+b

a0=rand () \* (range2-range1) + range1;

a=fsolve(@F, a0);

take left lower landmark as example, assume the position of robot is Q

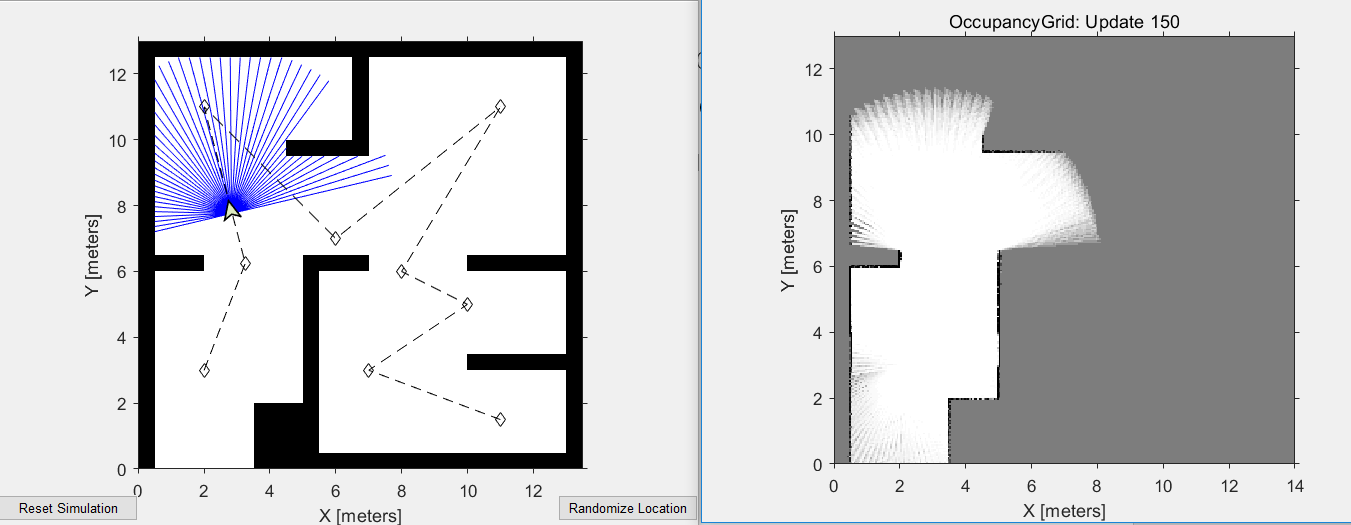
in order to calculate

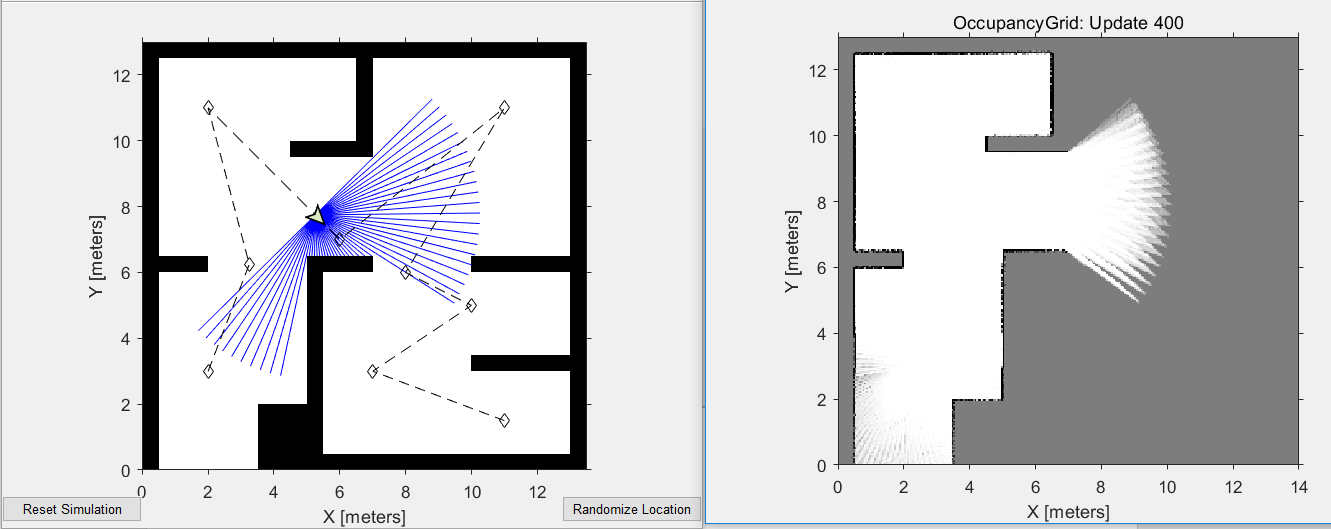
the left upper landmark pose(1) should be

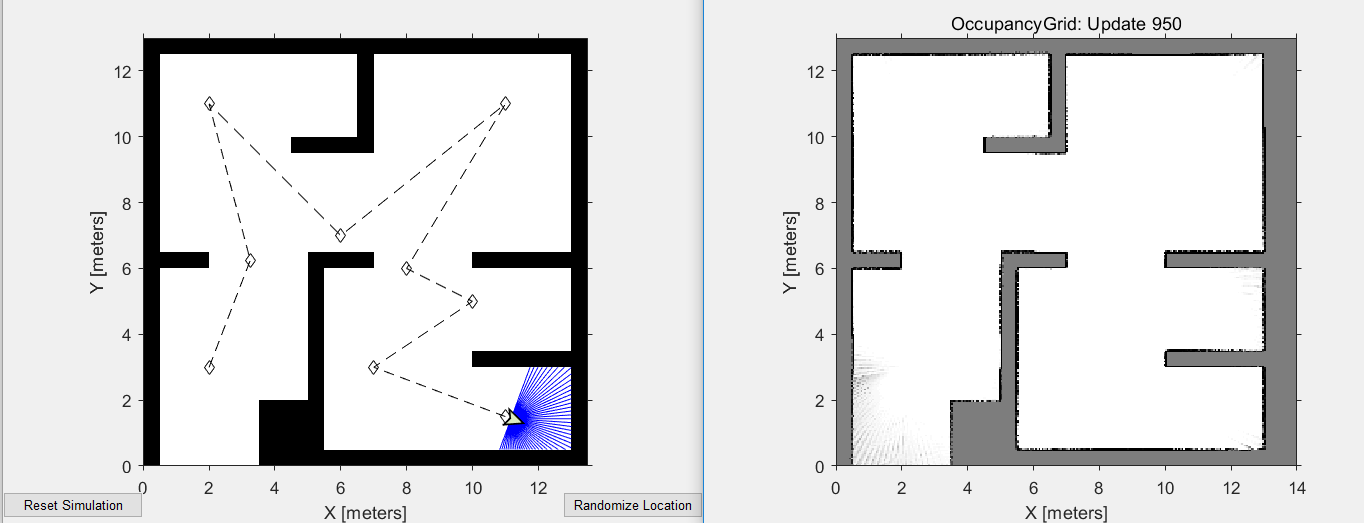
the right lower landmark pose(3) should be

the right upper landmark pose(4) should be

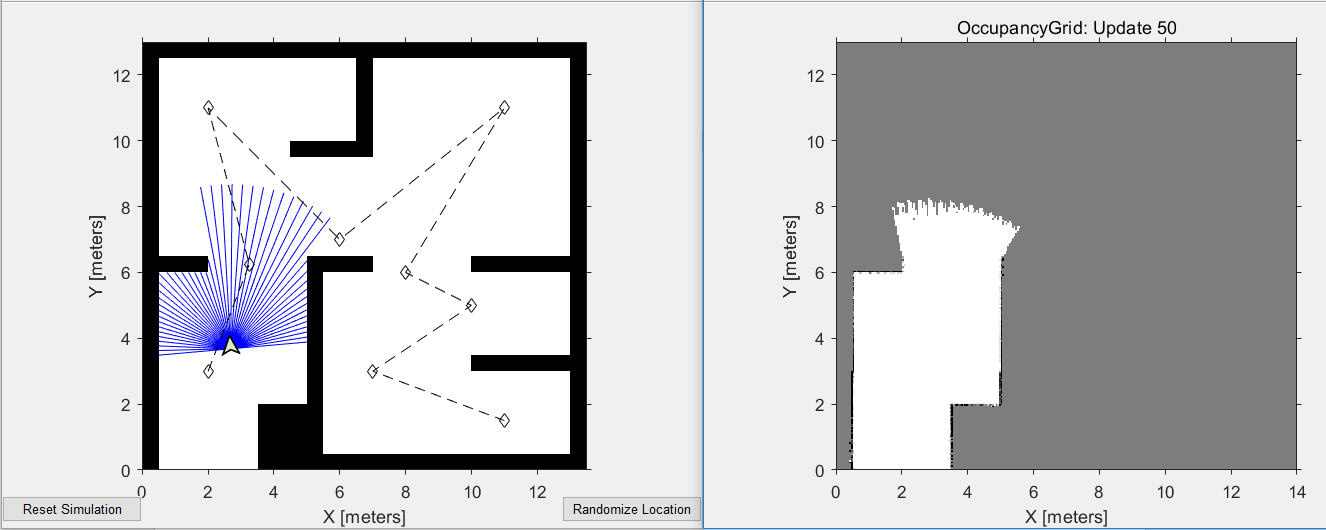
## problem 2

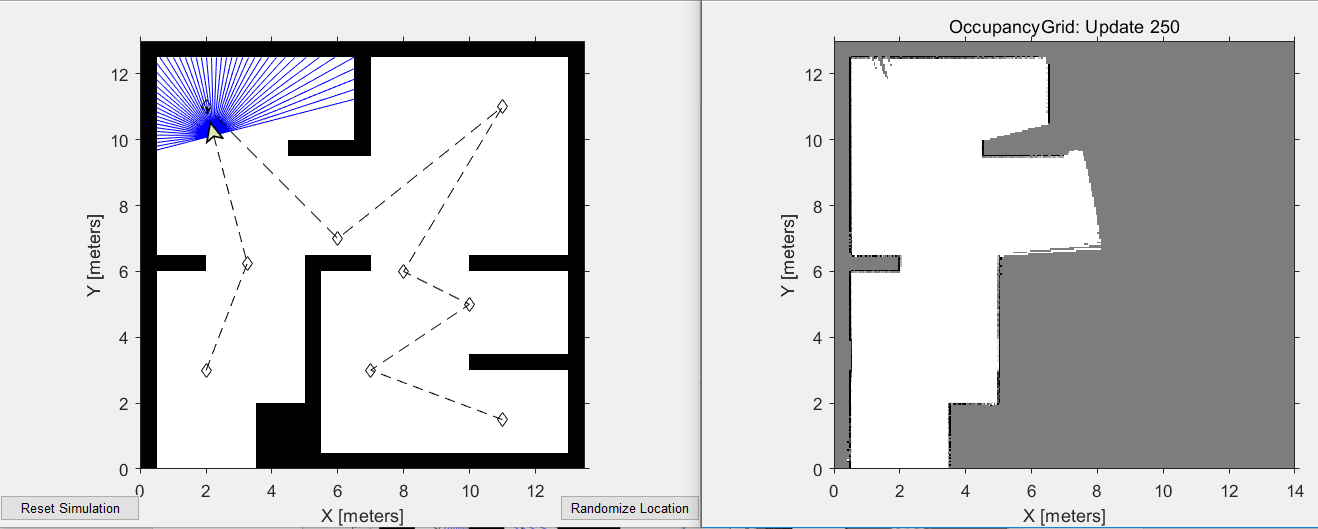


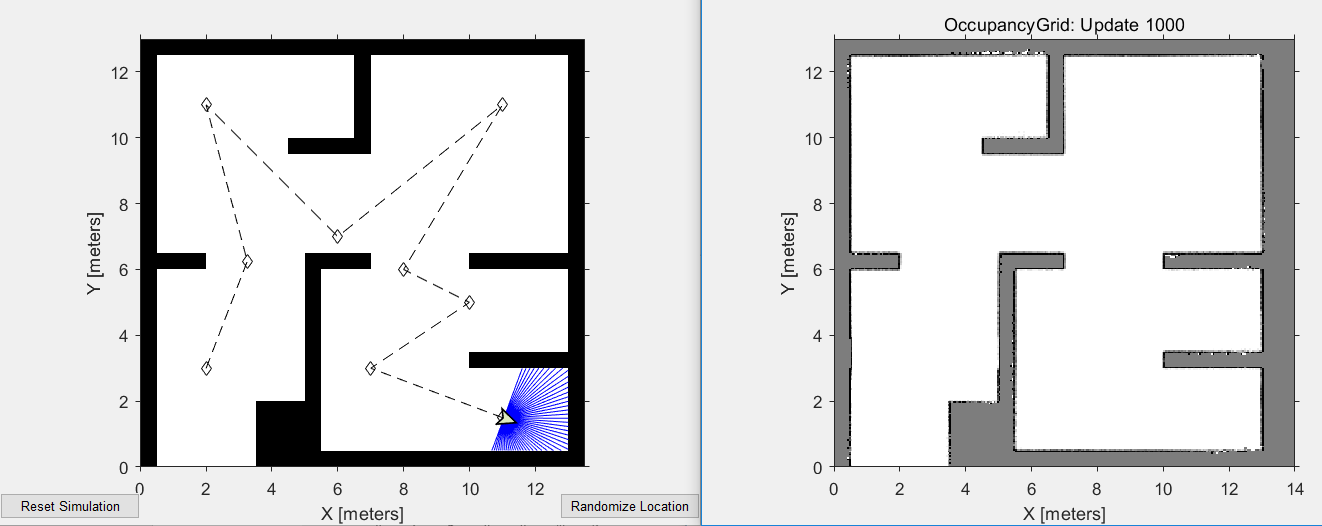




## problem 3







## Problem 4

For the left lower single landmark, A

Other landmarks are the same idea

**Results is shown as below:**

