

## HW1

a).

Uniform:

magnitude =  $C$ ,  $C$  is a constant value

~~direction~~ direction =  $\vec{a}$ ,  $\vec{a}$  is an immutable direction.

Perpendicular:

magnitude =  $C$ ,  $C$  is a constant.

direction =  $\vec{p}$ ,  $\vec{p}$  is perpendicular to wall and outwards to wall.

Attractive: •

$d$  is the distance between object and center point;  $R$  is the radius of center ~~object~~ point.

$$\text{magnitude} = \begin{cases} \frac{F}{d}, & d > R \\ \infty, & d \leq R \end{cases}$$

direction =  $\vec{p}$ ,  $\vec{p}$  is always pointing <sup>towards</sup> center.

Repulsive:

$$\text{magnitude} = \begin{cases} \frac{F}{d}, & d > R \\ \infty, & d \leq R \end{cases}, d, R \text{ is same as "Attractive"}$$

direction =  $\vec{p}$ ,  $\vec{p}$  is always pointing outwards center.

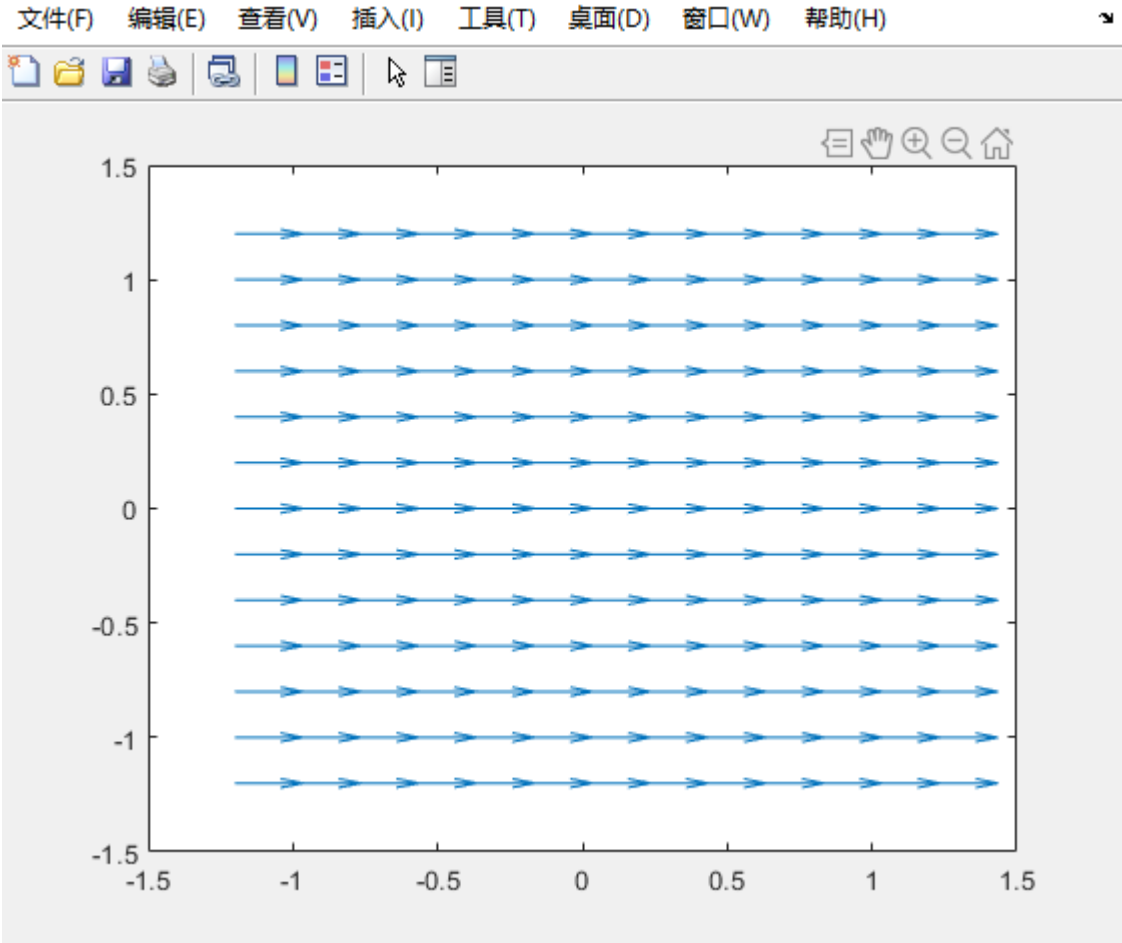
to the same rotation direction.

Tangential:

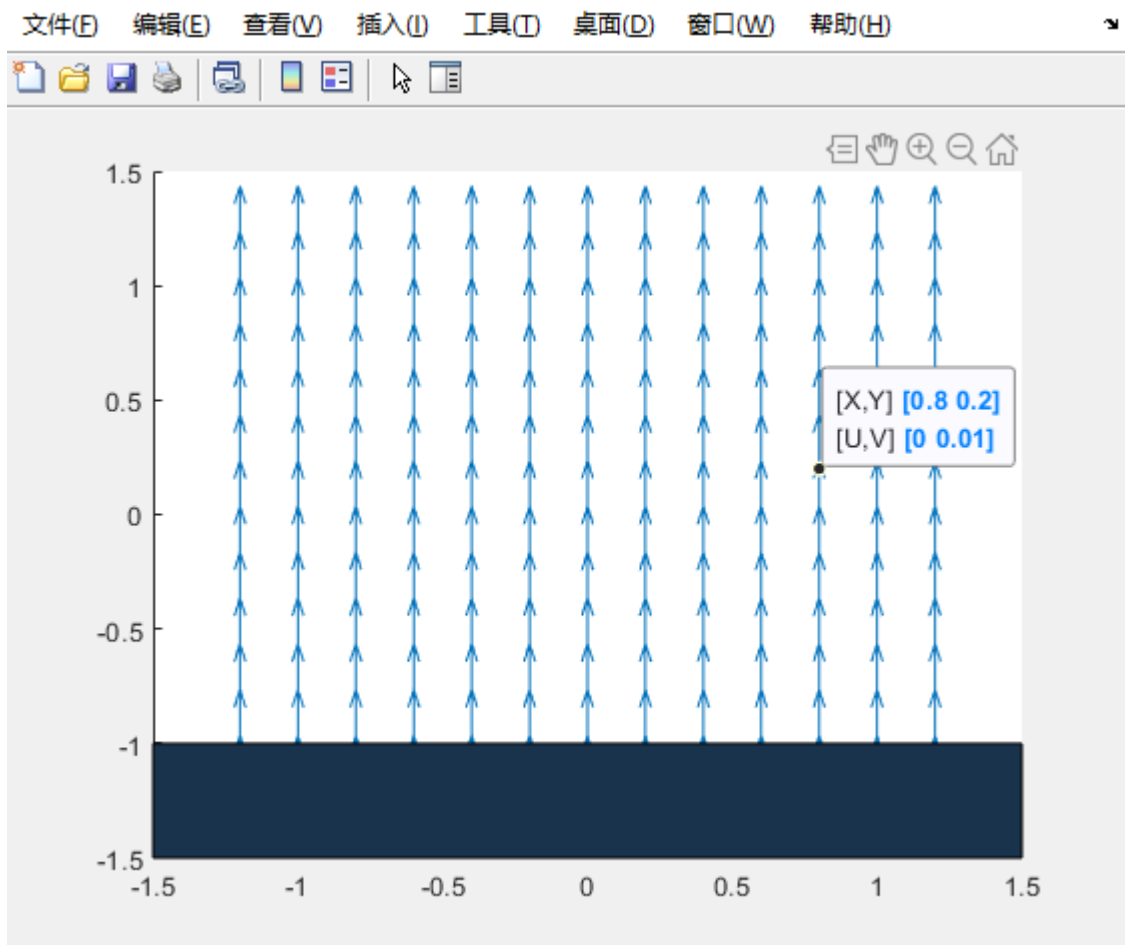
$$\text{magnitude} = \begin{cases} \frac{F}{d}, & d > R \\ \infty, & d \leq R \end{cases}, d, R \text{ is same as "Attractive"}$$

direction =  $\vec{p}$ ,  $\vec{p}$  is perpendicular to the line between object and center ~~point~~ point, and pointing

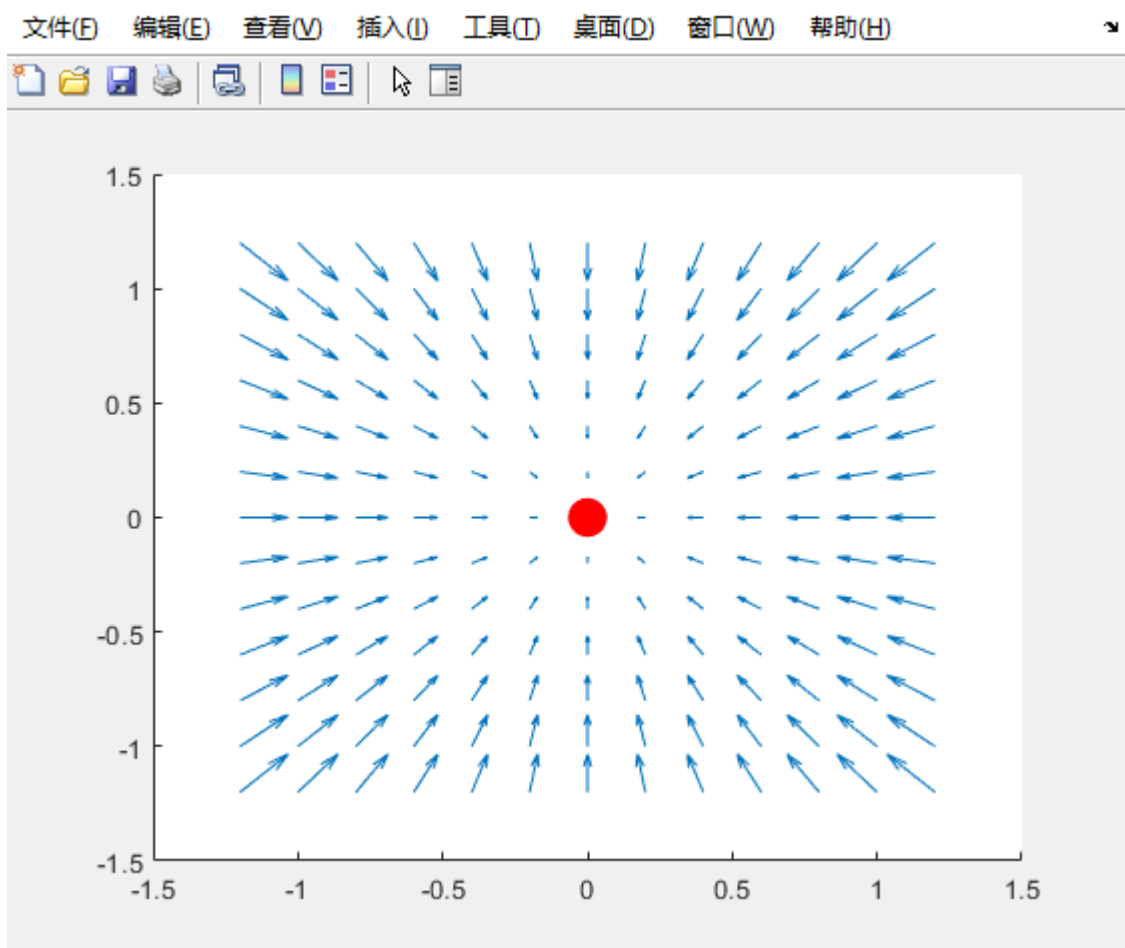
b).



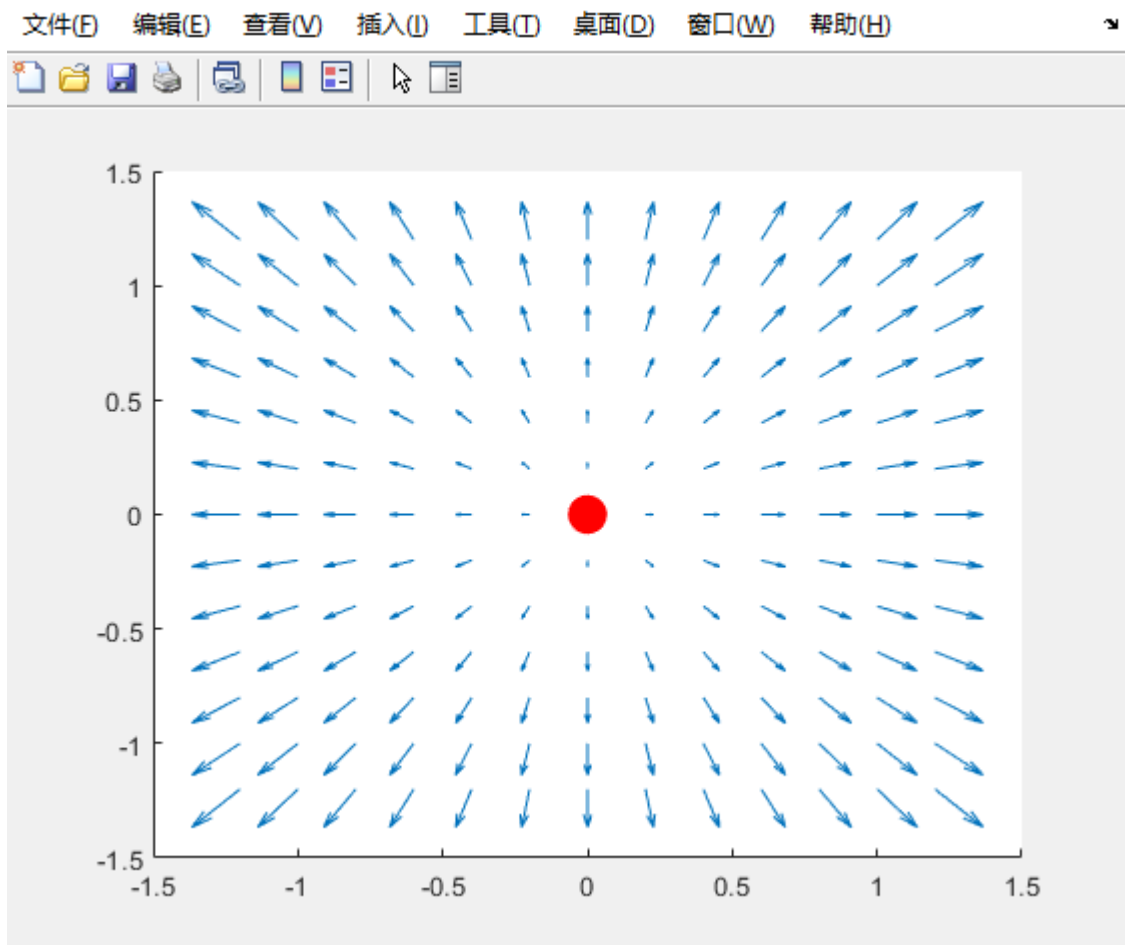
uniform



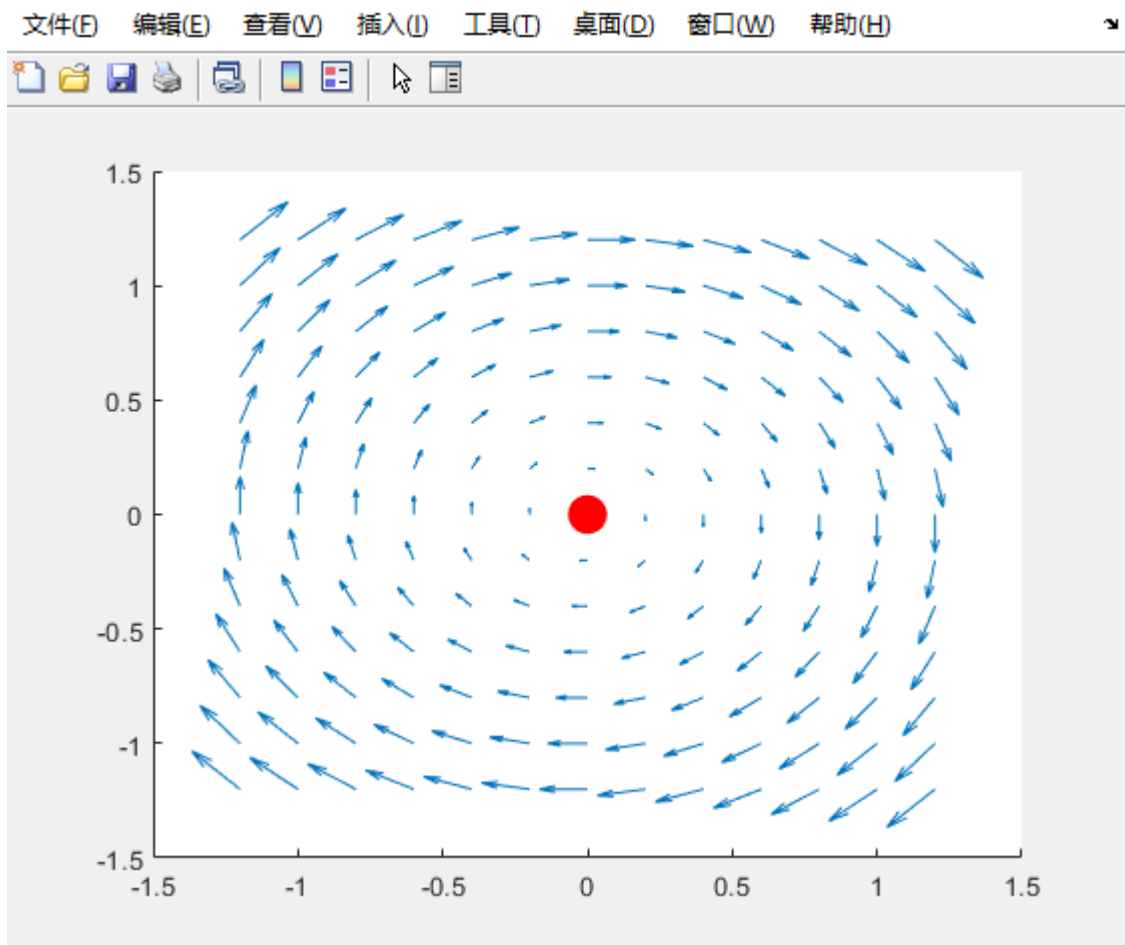
perpendicular



attractive

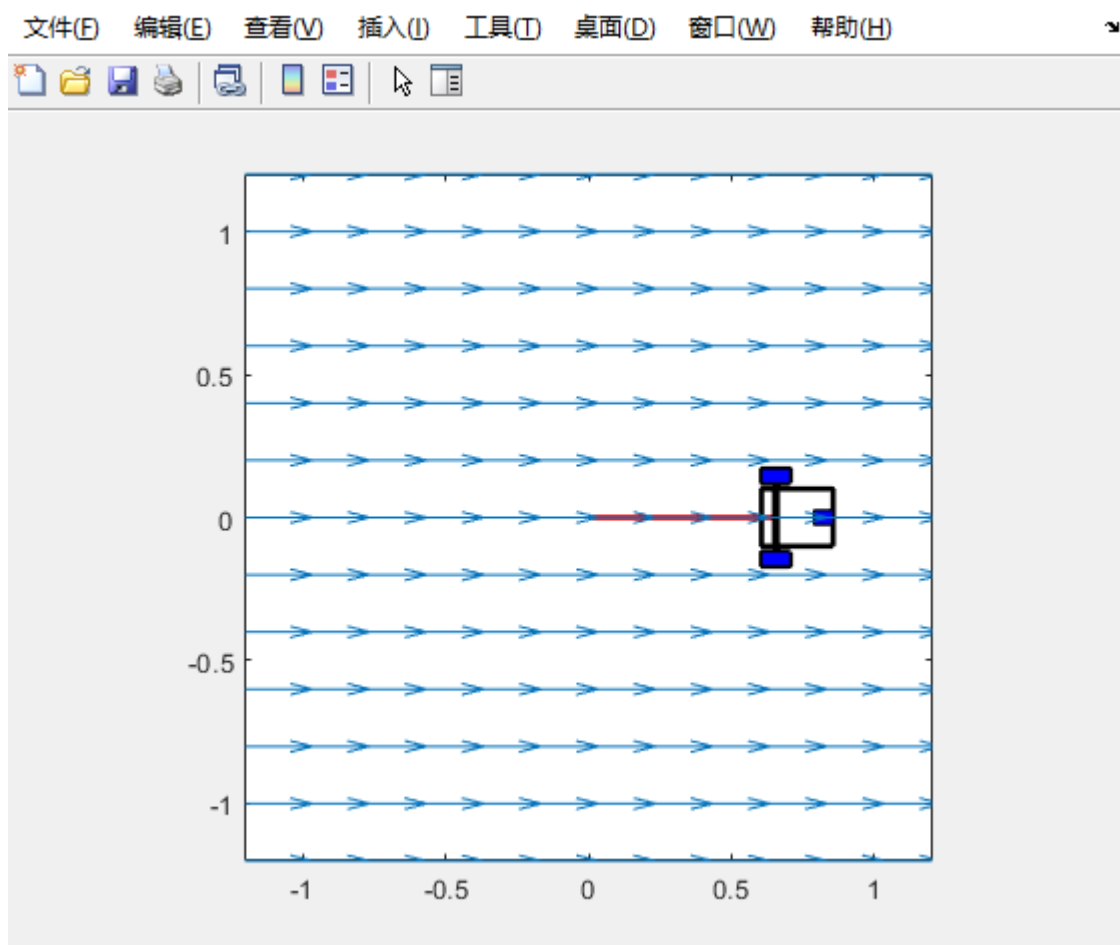


repulsive

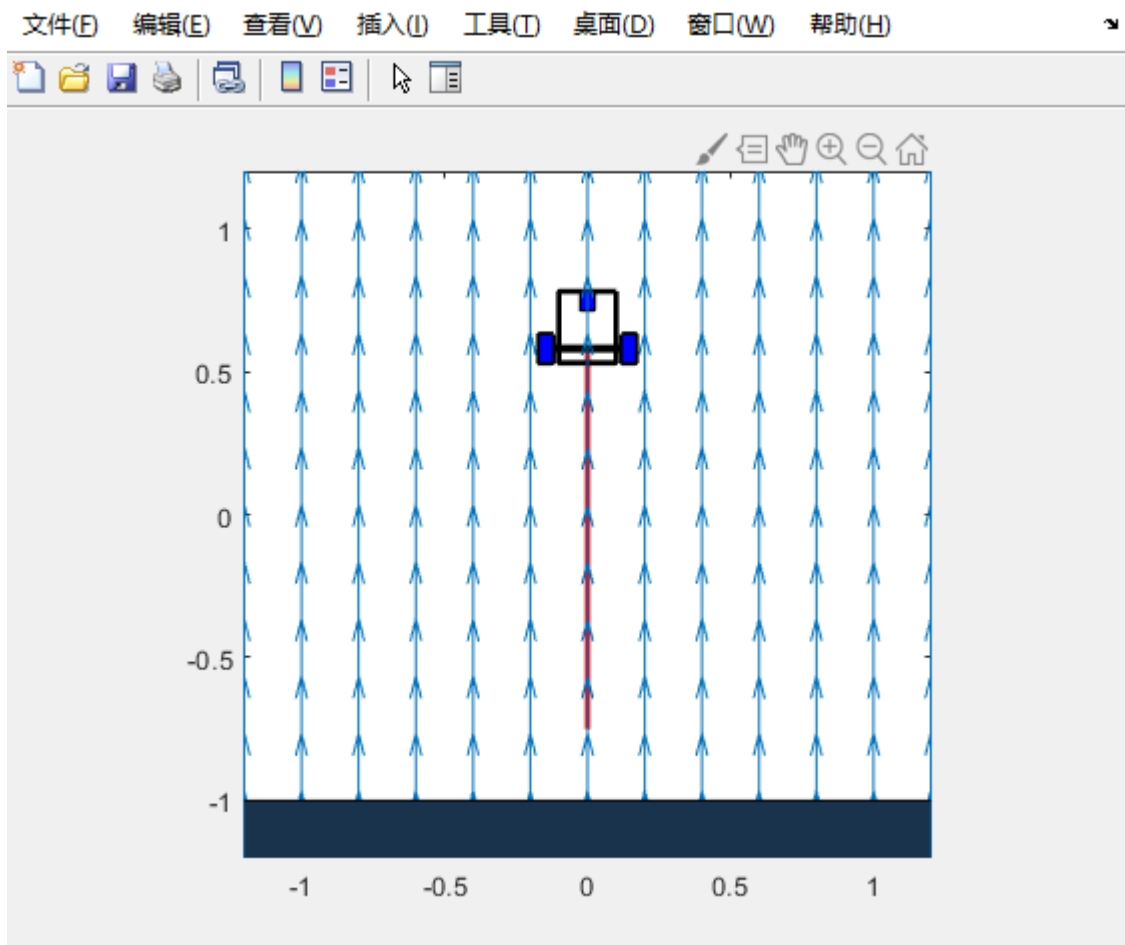


tengrential

c).



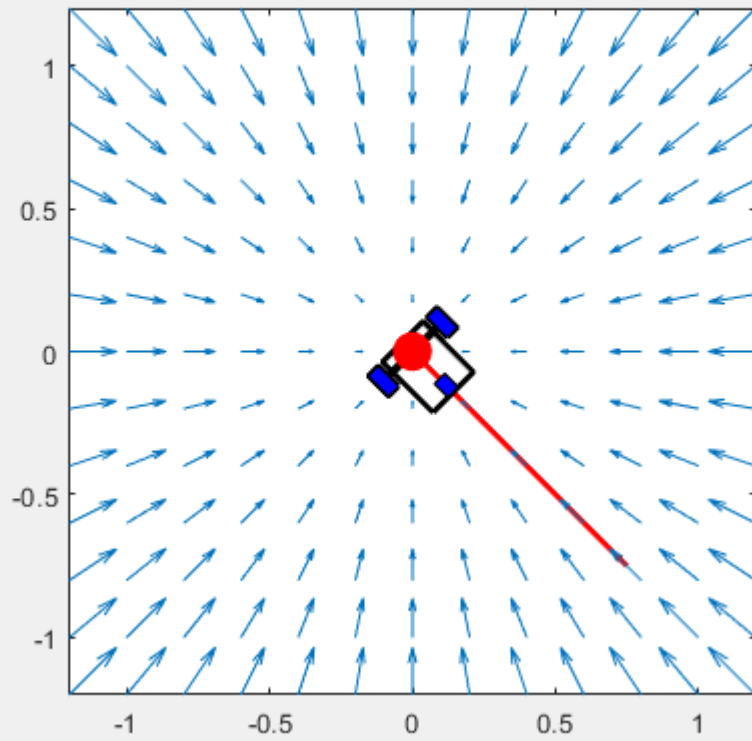
uniform



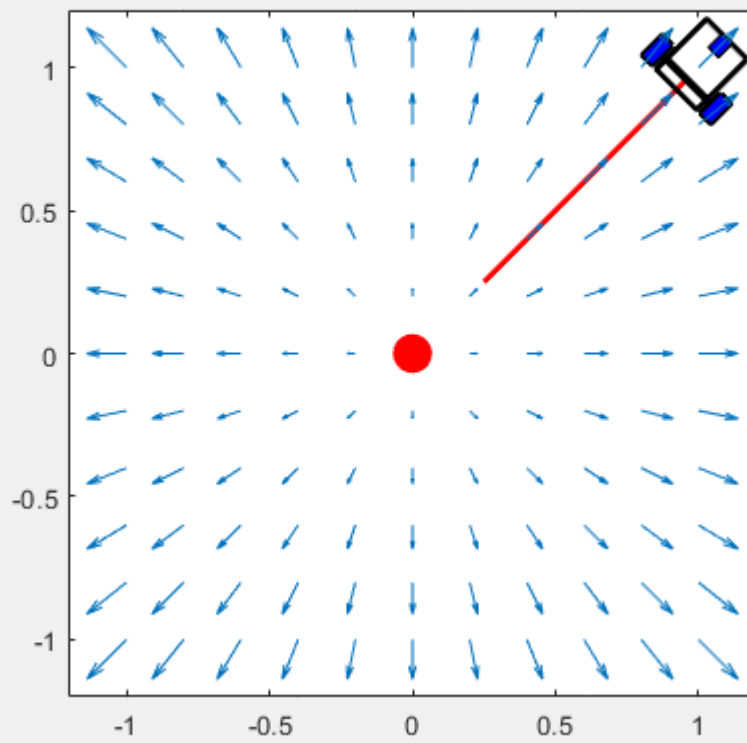
perpendicular



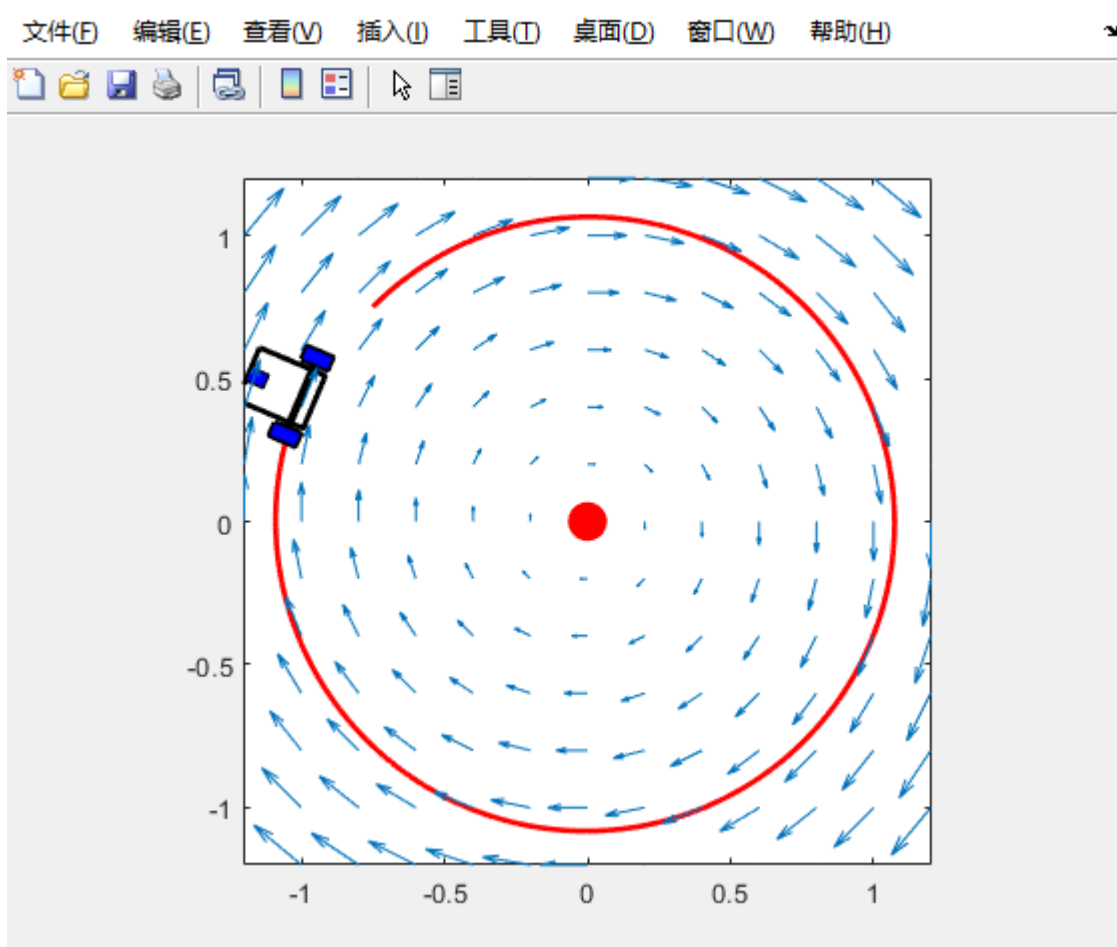
文件(F) 编辑(E) 查看(V) 插入(I) 工具(T) 桌面(D) 窗口(W) 帮助(H)



attractive



repulsive



tengrential