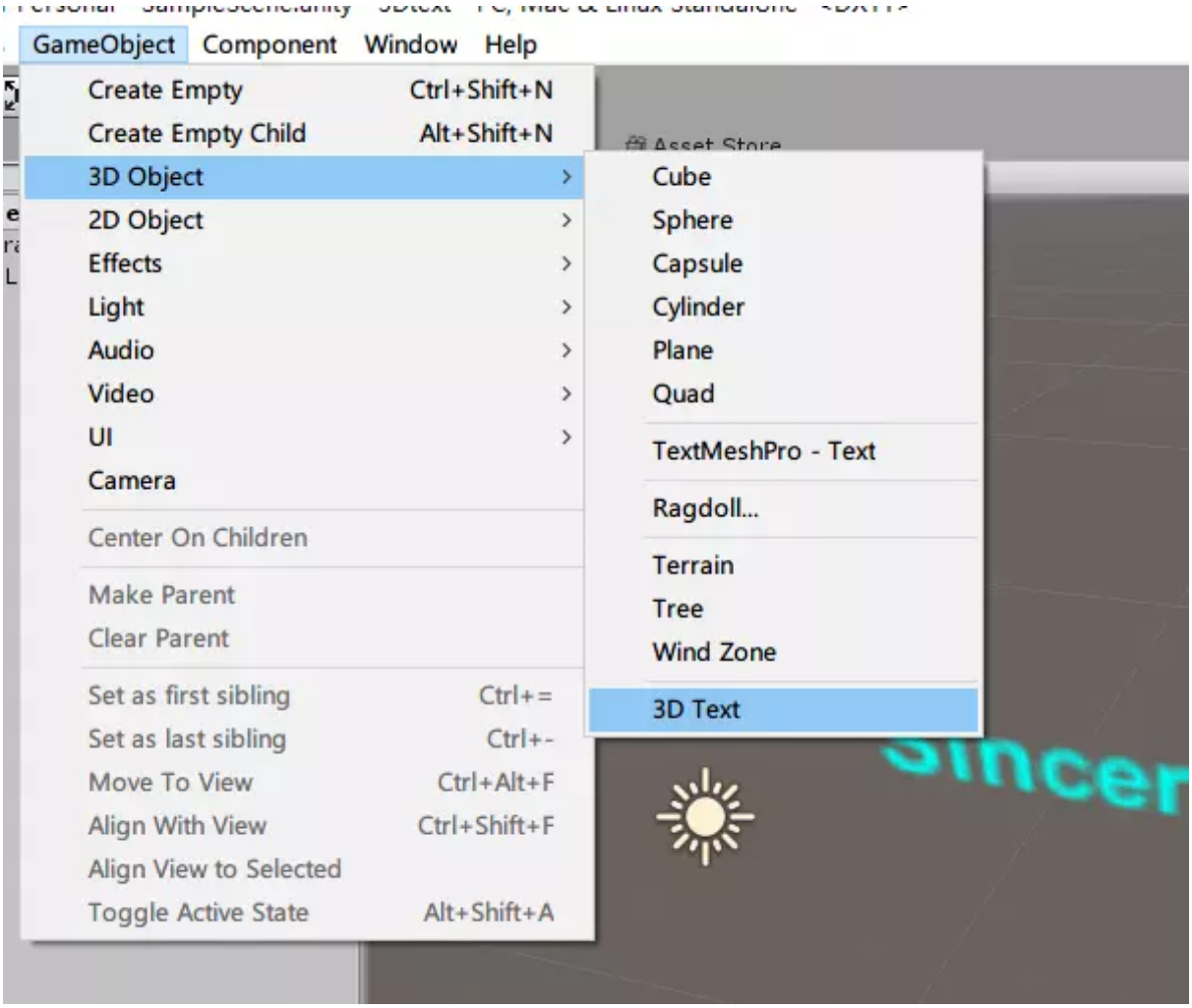
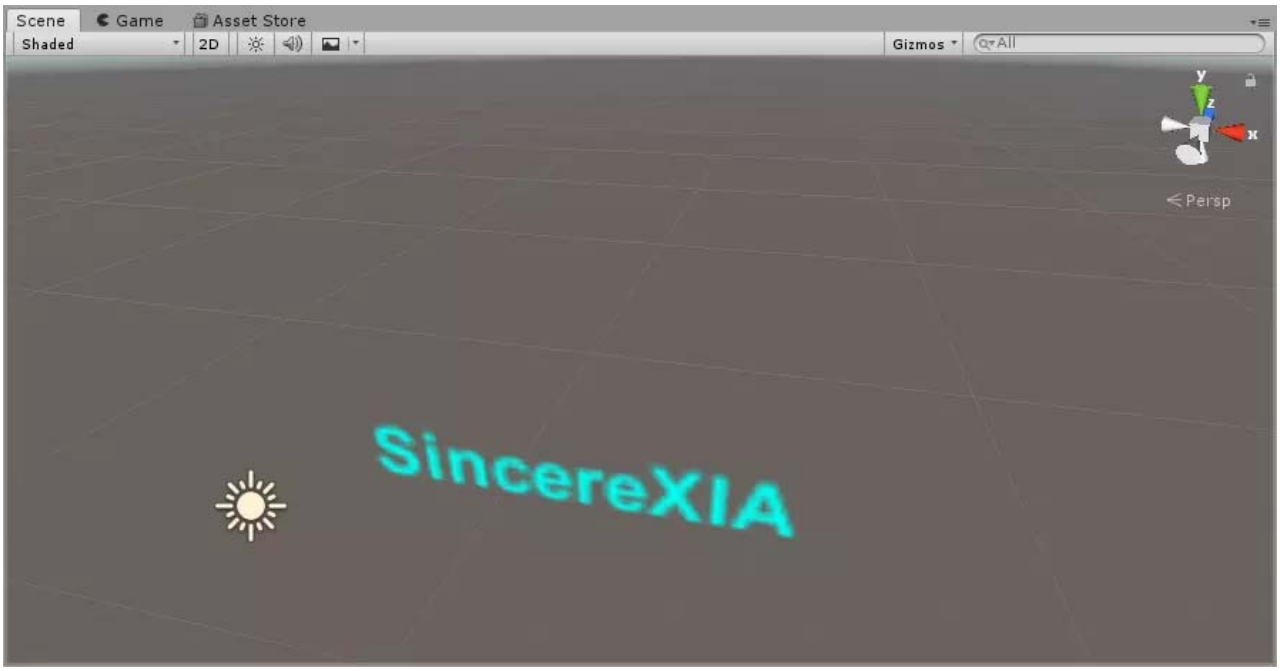
例子

3D 字体

根据鼠标移动距离来旋转 3D 字体

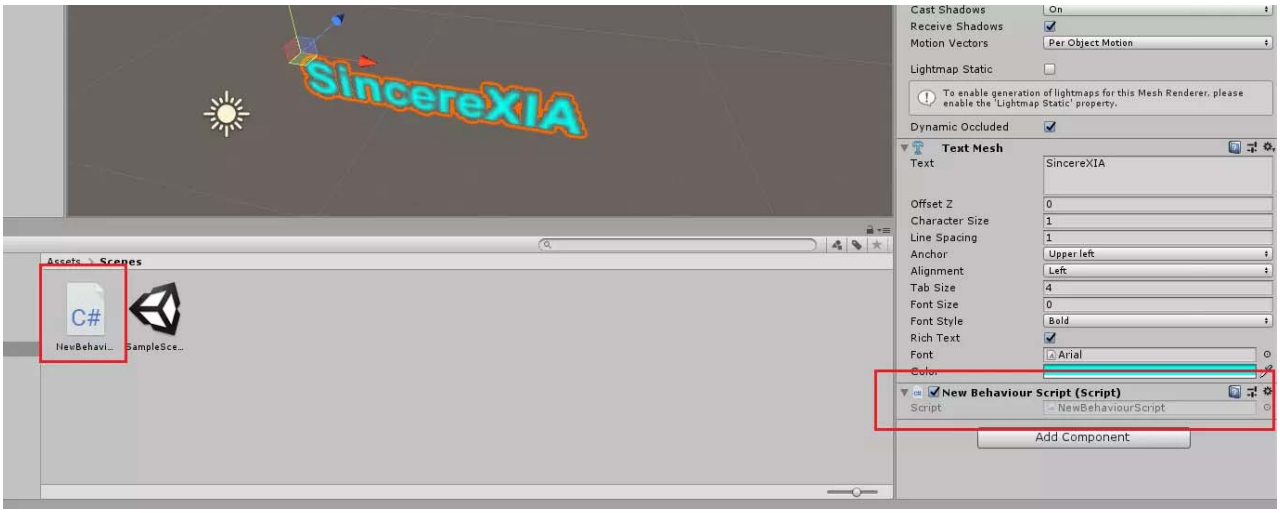
1. **添加 3D 字体组件**



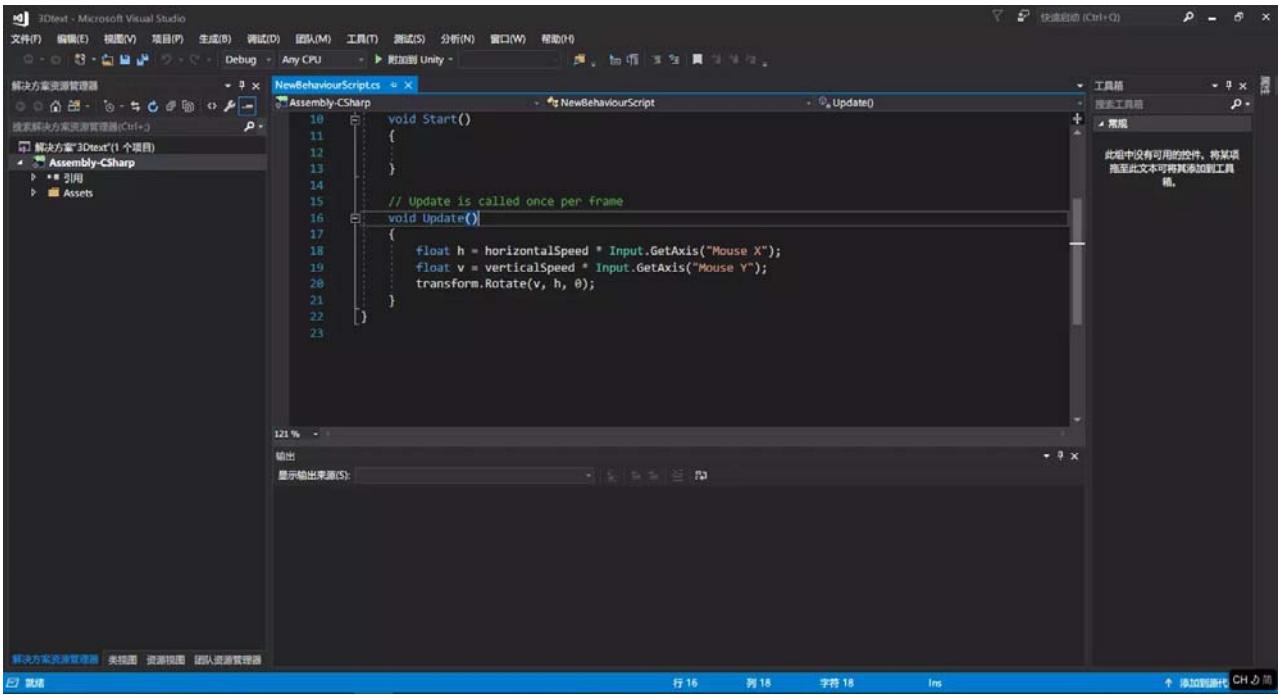


2. **新建脚本文件**

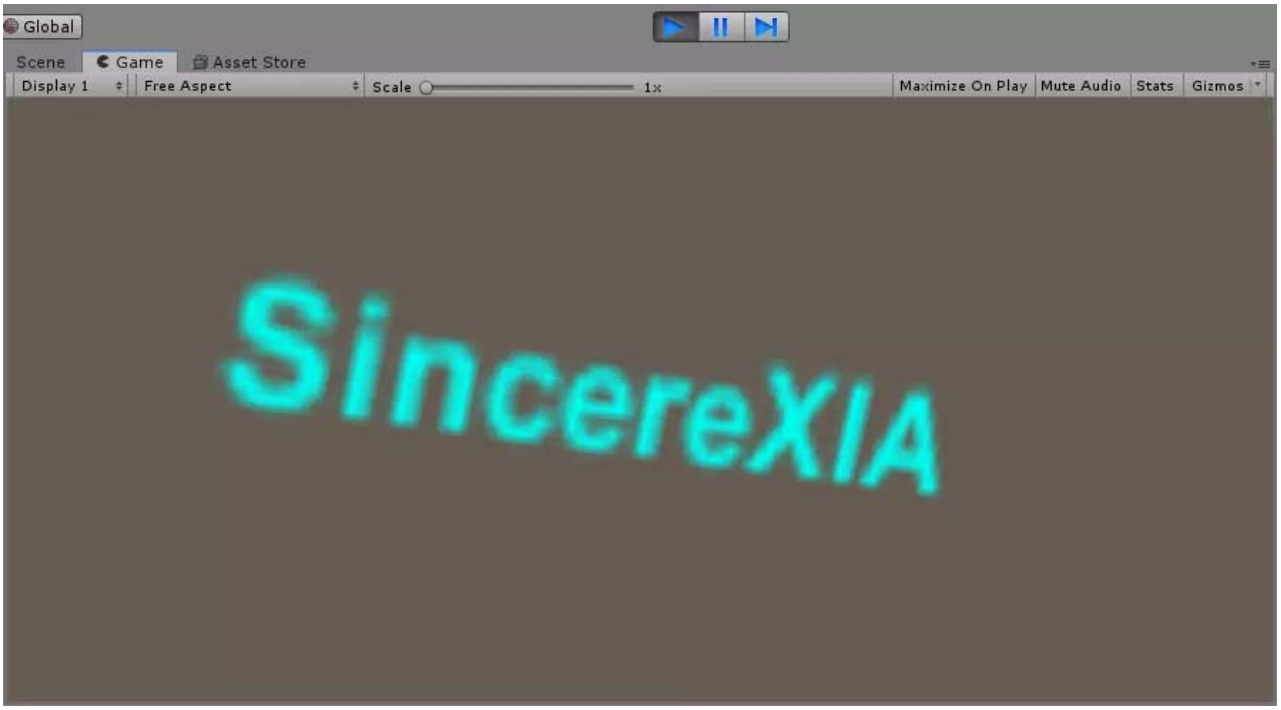
3. **将脚本添加到创建的游戏对象上**



4. **编辑脚本**



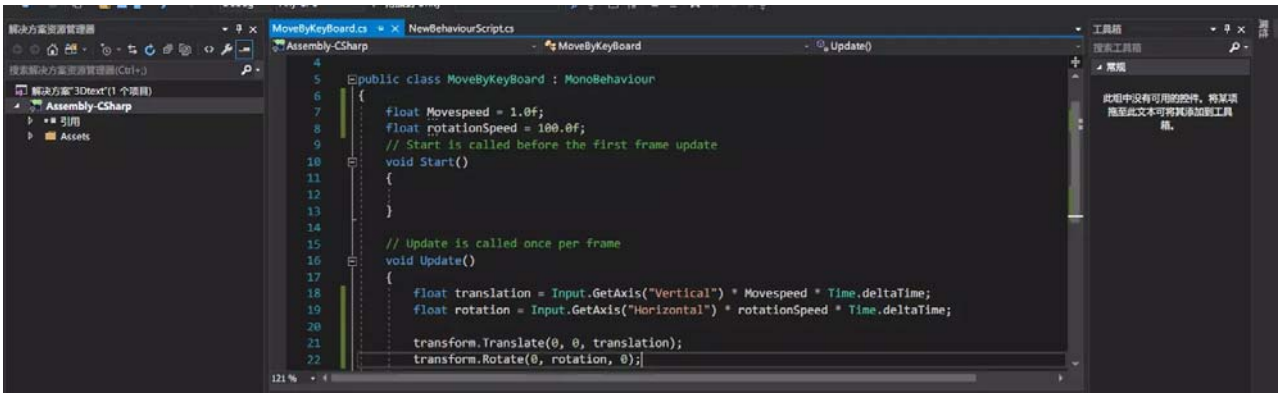
5. **启动游戏运行**



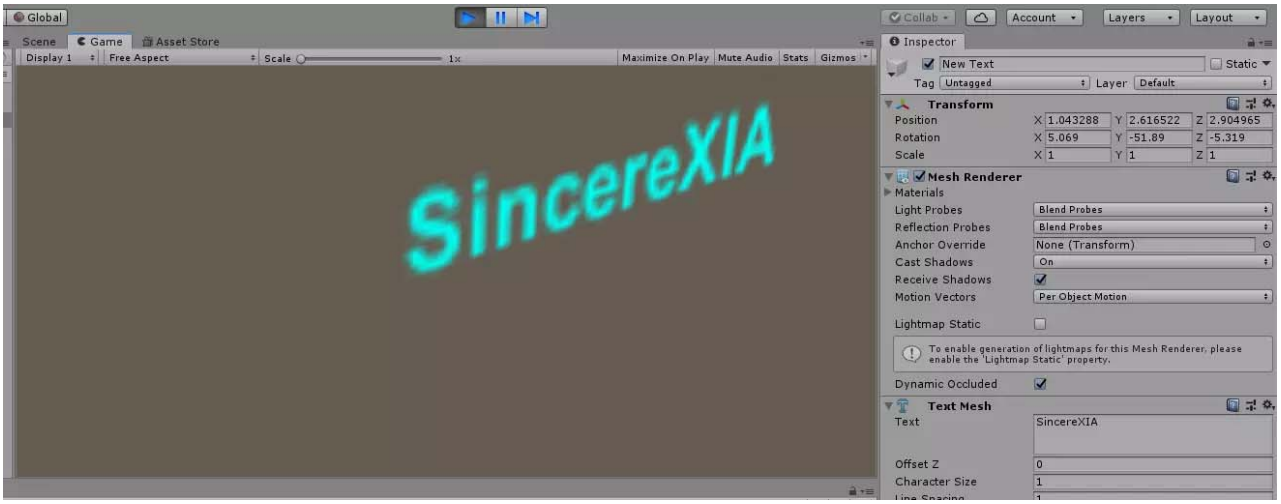
游戏内文字随着鼠标的移动而旋转

键盘操作

1. 编辑新的脚本



2. 绑定脚本并进行测试

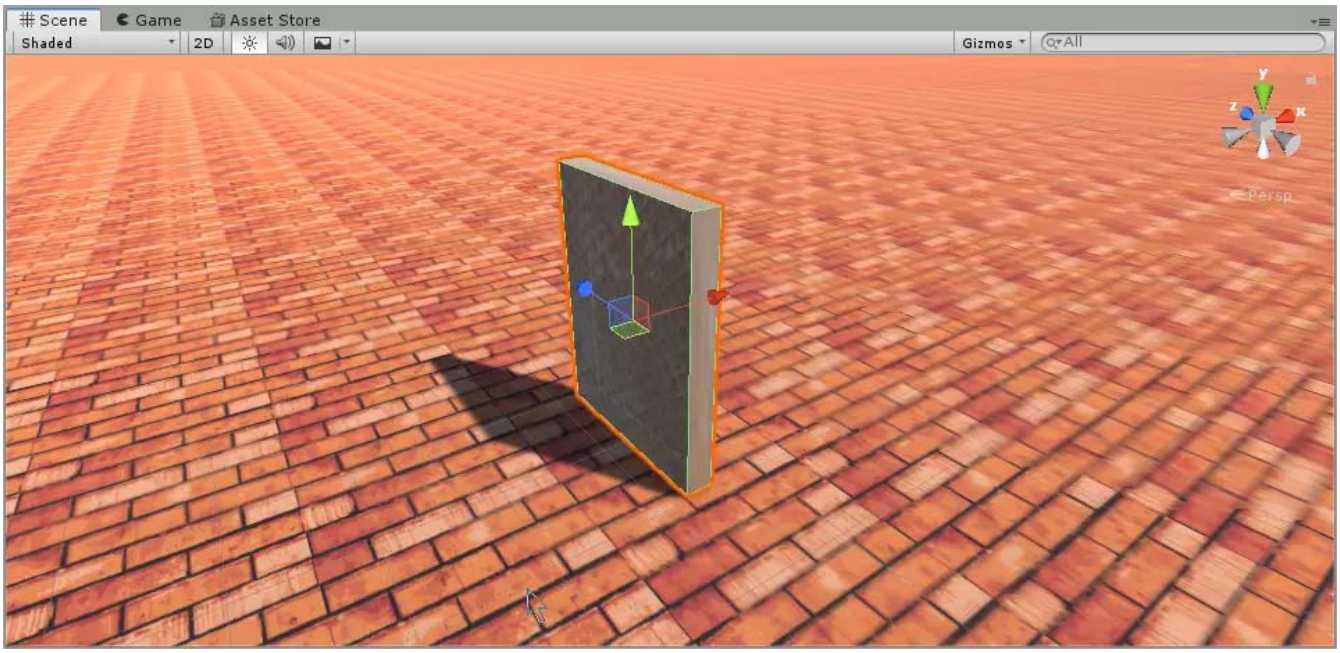


使用方向键可以控制模型在 x-z 平面上的移动

练习

游戏对象跟随鼠标移动、旋转

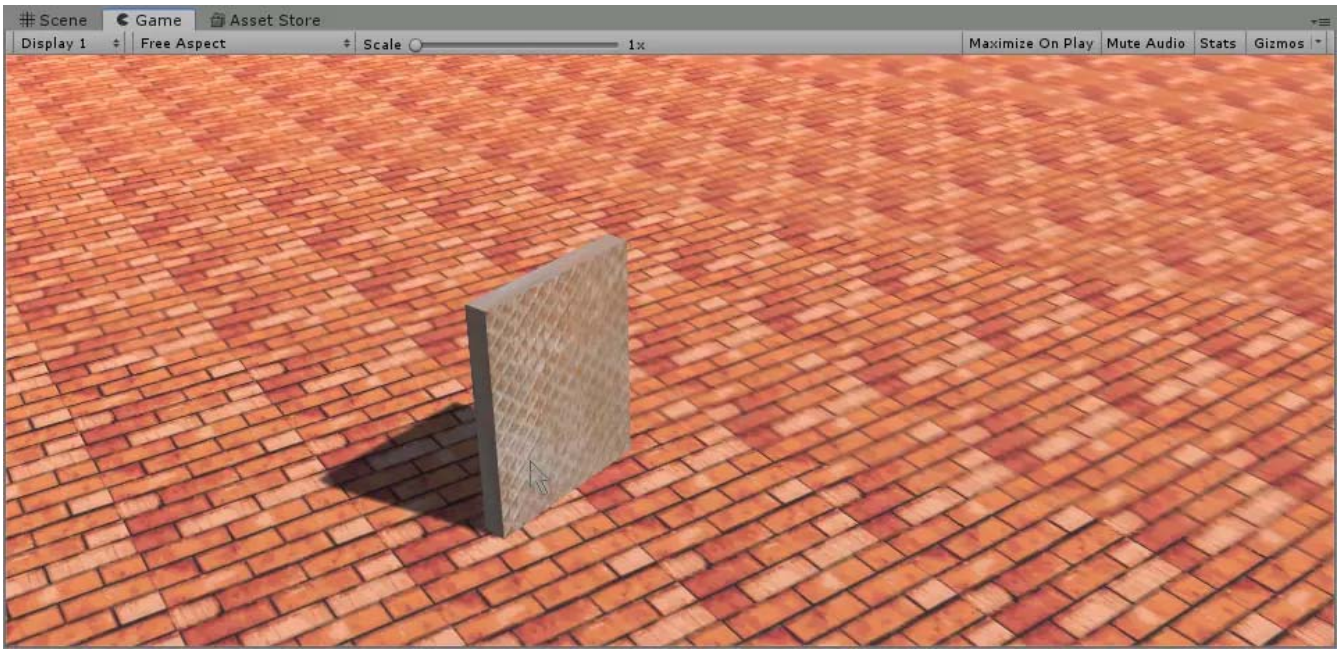
建立 Cube 游戏对象，并添加纹理贴图



编写跟随鼠标移动的脚本

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class Follow : MonoBehaviour
{
    Vector3 world;//物体要移动到的位置  (世界坐标系)
    bool isfixed = false;
    void Update()
    {
        Vector3 targetposition =
Camera.main.WorldToScreenPoint(this.transform.position);//将物体的世界坐标转换为屏幕坐标

        Vector3 mouse_position = Input.mousePosition;//鼠标在屏幕上的位置坐标
        mouse_position.z = targetposition.z;

        //world=Camera.main.ScreenToWorldPoint(mouse position);//这种情况下 会有穿透现象
        world.x = Camera.main.ScreenToWorldPoint(mouse_position).x;
        world.z = Camera.main.ScreenToWorldPoint(mouse_position).z;
        world.y = this.transform.position.y;
            if (this.transform.position != world)
            {
                this.transform.position = world;
            }
    }
}

```

将脚本添与 Cube 对象绑定，即可实现通过鼠标移动，控制物体在 x，z 平面上移动



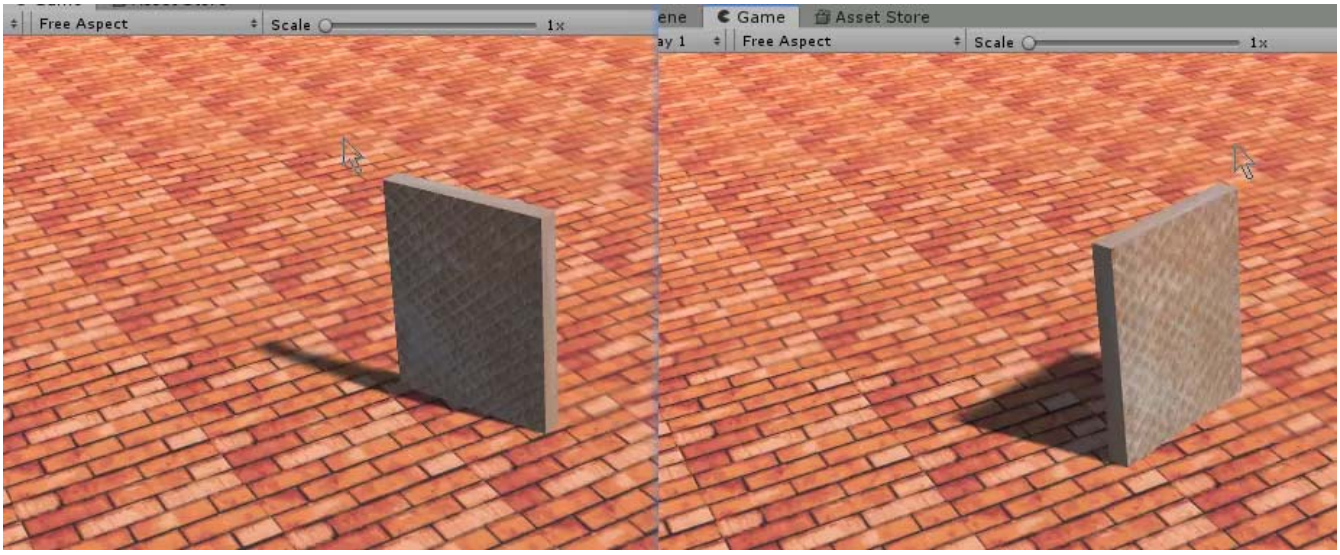
跟随鼠标旋转

补充之前的脚本，增加按右键固定游戏对象位置，并跟随鼠标旋转的功能

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class Follow : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }

    Vector3 world;//物体要移动到的位置  (世界坐标系)
    bool isfixed = false;

    void Update()
    {
        Vector3 targetposition =
Camera.main.WorldToScreenPoint(this.transform.position);//将物体的世界坐标转换为屏幕坐标

        Vector3 mouse_position = Input.mousePosition;//鼠标在屏幕上的位置坐标
        mouse_position.z = targetposition.z;

        //world=Camera.main.ScreenToWorldPoint(mouse position);//这种情况下 会有穿透现象

        world.x = Camera.main.ScreenToWorldPoint(mouse_position).x;
        world.z = Camera.main.ScreenToWorldPoint(mouse_position).z;
        world.y = this.transform.position.y;

        if (!isfixed)
        {
```

```
31
32              if (this.transform.position != world)
33              {
34                  this.transform.position = world;
35              }
36
37          }
38          if (Input.GetMouseButton(0))
39          {
40              isfixed = true;
41          }
42          if (Input.GetMouseButtonDown(1))
43          {
44              isfixed = true;
45          }
46          this.transform.LookAt(world);
47          if (Input.GetMouseButtonUp(1))
48          {
49              isfixed = false;
50          }
51      }
52  }
53
```

进入游戏测试，可见游戏对象可以完成跟随鼠标右键旋转



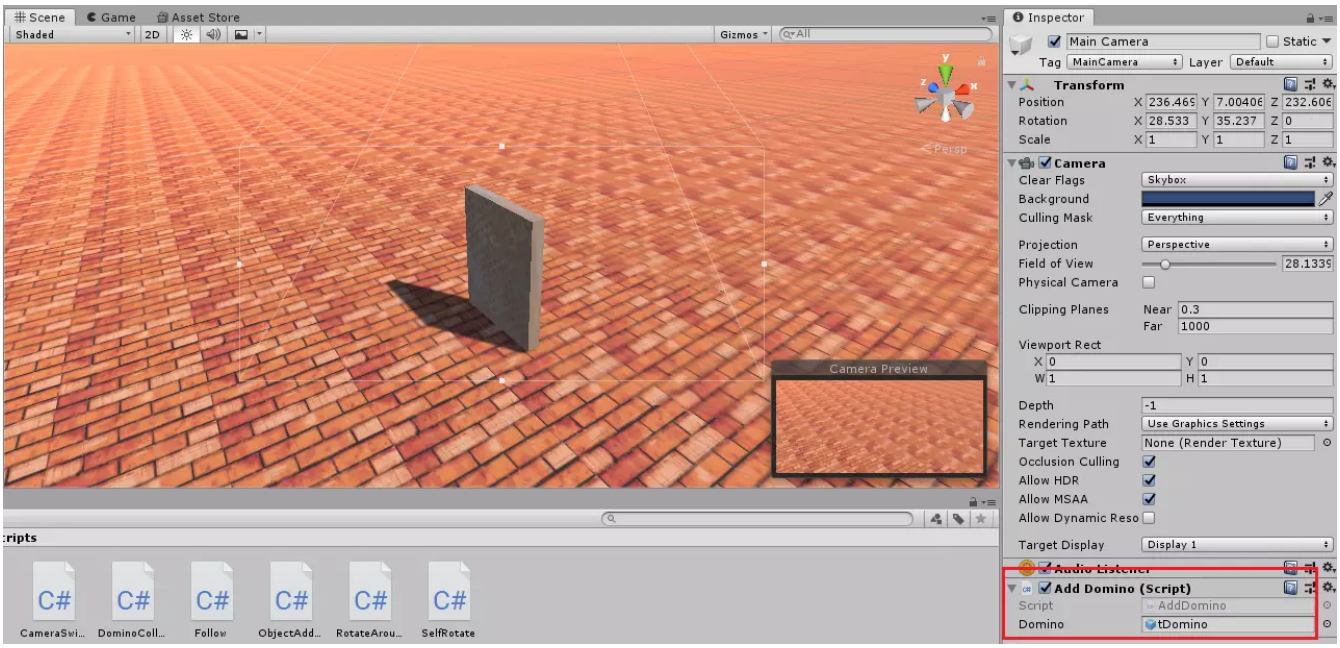
键盘随输入某个键创建/实例化游戏对象

编写游戏脚本 `AddDomino.cs`

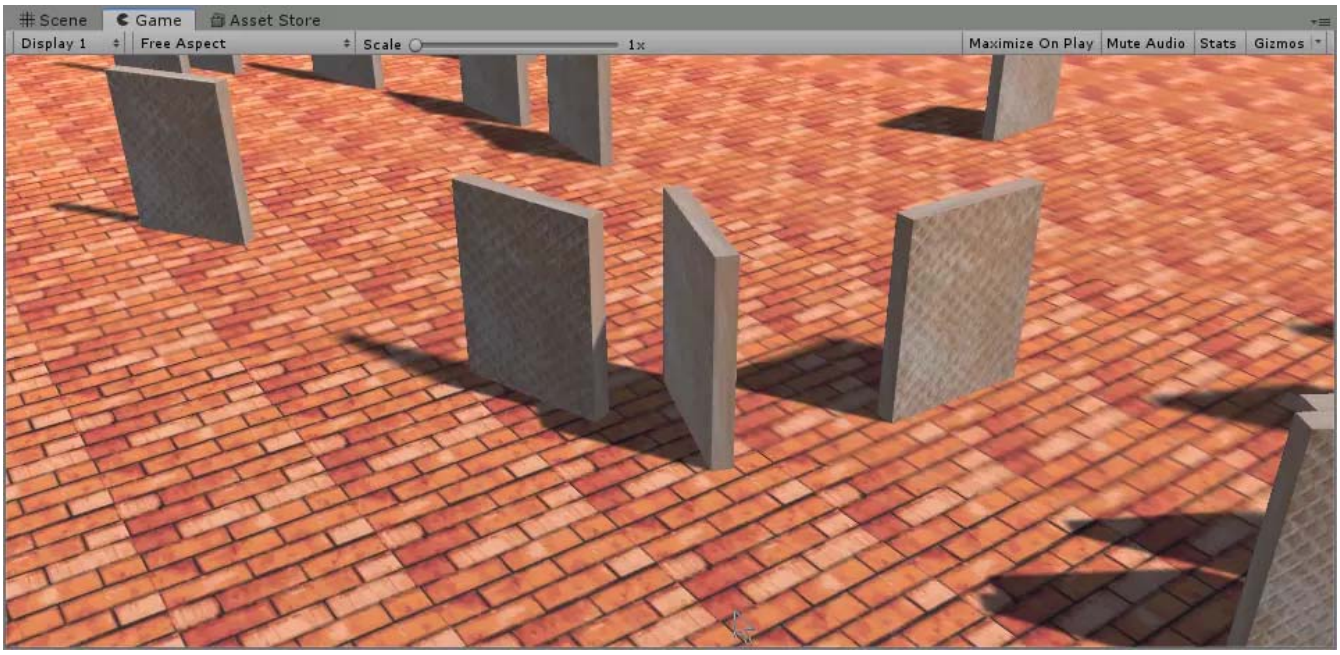
```
1  using System.Collections;
2  using System.Collections.Generic;
3  using UnityEngine;
4
5  public class AddDomino : MonoBehaviour
6  {
7      // Start is called before the first frame update
```

```
    public GameObject Domino;
    void Start()
    {

    }

    // Update is called once per frame
    void Update()
    {
        if (Input.GetKeyDown(KeyCode.Space))
        {
            GameObject domino =  Instantiate(Domino, new Vector3(230f, 1.1f, 40f),
Quaternion.identity);
        }
    }
}

```

将脚本与 Main Camera 绑定，并设定 Domino 游戏对象、



进入游戏进行测试，按 Space 键即可完成游戏对象的创建



自学 unity 用户手册