数据可视化——利用blender实现三维数据动画

循环

```
import bpy
from random import randint

bpy.ops.object.select_all(action='SELECT')
bpy.ops.object.delete(use_global=False)


number = 10
for i in range(0, number):
    x = randint(-10, 10)
    y = randint(-10, 10)
    z = randint(-10, 10)
    bpy.ops.mesh.primitive_monkey_add(location=(x, y, z))
    bpy.ops.object.subdivision_set(level=2, relative=False)
    bpy.ops.object.shade_smooth()
```

表格数据-3D

```
import bpy
import csv

#bpy.context.scene.tool_settings.transform_pivot_point = 'CURSOR'

print("----------------------------")
with open(r'C:\Users\sample.csv') as f:
    data = list(csv.reader(f))

n = 1

for i in data:
    bpy.ops.mesh.primitive_cube_add()
    bpy.ops.transform.translate(value= (n , 0 , 0))
    bpy.context.object.scale = (1, 0, 1)
    bpy.context.scene.frame_set(0)
    bpy.ops.anim.keyframe_insert(type = 'LocRotScale' )

    bpy.context.scene.frame_set(100)
    bpy.context.object.scale = (1, float(i[1]), 1)
    bpy.ops.transform.translate(value= (0 , float(i[1]) , 0))
    bpy.ops.anim.keyframe_insert(type = 'LocRotScale' )
```

```
    bpy.ops.object.text_add(enter_editmode=False, align='WORLD', location=(n-
0.5, -1, 0))
    bpy.context.object.data.body = i[0]
    n += 3
```

作业