# jupyter魔法命令

### %run

```
In [1]: %run /Users/tiramisu/Desktop/test.py
hello python!
```

### %load

```
In [2]: # %load test.py
print('hello python!')
hello python!

In [4]: import my.demo

In [5]: my.demo.show('梓逸宸')
梓逸宸

In [6]: from my.demo import show

In [7]: show('过往云烟')
过往云烟
```

### %timeit

%timeit 计算一行命令的运算时间

%%timeit 计算一个代码段的运行时间

```
In [9]: \$timeit li = [i**2 for i in range(1000)] 341 \mus ± 9.32 \mus per loop (mean ± std. dev. of 7 runs, 1000 loops each)
```

```
In [10]: %timeit li = [i**2 for i in range(1000000)]
          368 ms \pm 11.8 ms per loop (mean \pm std. dev. of 7 runs, 1 loop each
          )
 In [11]: %timeit li = [i**2 for i in range(10)]
          3.72 \mus ± 193 ns per loop (mean ± std. dev. of 7 runs, 100000 loop
          s each)
 In [12]:
          %%timeit
          li = []
          for i in range(1000):
              li.append(i**2)
          411 \mus ± 5.01 \mus per loop (mean ± std. dev. of 7 runs, 1000 loops
          each)
%time
%time 无论什么代码,都只执行一遍 1 loop each
%%time 计算代码段执行一遍的时间
 In [15]:
          %time li = [i**2 for i in range(1000)]
          CPU times: user 365 \mus, sys: 0 ns, total: 365 \mus
          Wall time: 371 \mus
 In [16]: | %%time
          li = []
          for i in range(1000):
              li.append(i**2)
          CPU times: user 527 \mus, sys: 1e+03 ns, total: 528 \mus
          Wall time: 536 \mus
 In [22]: | import random
          li = [random.random() for i in range(1000)]
          %timeit li.sort()
          18.5 \mus ± 509 ns per loop (mean ± std. dev. of 7 runs, 100000 loop
 In [21]: li = [random.random() for i in range(1000)]
          %time li.sort()
```

CPU times: user 373  $\mu$ s, sys: 57  $\mu$ s, total: 430  $\mu$ s

Wall time: 396  $\mu$ s

```
In [23]: \$time li.sort() CPU times: user 30 \mus, sys: 0 ns, total: 30 \mus Wall time: 33.9 \mus
```

### %%html

```
In [30]: %%html <div class="mytest" style="color: cyan">梓逸宸</div>
红豆生南国
```

## %%js

```
In [32]: %%js document.querySelector(".mytest").innerHTML = "红豆生南国";
```

#### Ī

!可以执行系统命令

```
! cd /Users/tiramisu/Desktop/ && ls
In [37]:
        $RECYCLE.BIN
        2018年创新创业--机票比较系统的替身
        7.18直播截屏
        OneDrive - csu.edu.cn
        Thumbs.db
        desktop.ini
        html笔记截屏
        job
        jsp
        me.jpeg
        my
        test.py
        www.runtofuture.cn.zip
        ~$系统课设设计.docx
        速云
        全校st-id
        牛客网--写简历
        优秀文章
        屏幕快照 2018-06-22 下午3.03.32.png
        屏幕快照 2018-07-03 下午3.39.58.png
        屏幕快照 2018-07-07 上午9.07.46.png
        屏幕快照 2018-08-06 下午2.42.57.png
        屏幕快照 2018-08-06 下午2.43.00.png
        屏幕快照 2018-08-06 下午2.45.02.png
        屏幕快照 2018-08-06 下午2.49.00.png
        屏幕快照 2018-08-06 下午2.52.04.png
        屏幕快照 2018-08-06 下午2.52.09.png
        屏幕快照 2018-08-06 下午2.55.15.png
        屏幕快照 2018-08-06 下午2.55.48.png
        屏幕快照 2018-08-06 下午2.56.43.png
        求职技巧.pptx
        全校部分js-id
```

### %%writefile

桌面文件夹

Writing new\_test.py

```
In [43]:
        ! ls
         Application Data
                                       PycharmProjects
         Applications
                                       QQ-cloud
         Applications (Parallels)
                                       Qt5.8.0
         CLionProjects
                                       QtProject
         Desktop
                                       System Volume Information
         Docker
                                       Workgroup
                                       bin
         Documents
         Downloads
                                       eclipse-workspace
         Google-cloud-disk
                                       iCloud 云盘(归档)
                                       iCloud 云盘(归档)
         HBuilder
                                       iCloud 云盘(归档)
         HBuilderProjects
                                                         - 2
                                       iCloud 云盘(归档) - 3
         Hexo
         IdeaProjects
                                       jupyter_note.ipynb
         Kingsoft
                                       my
         Library
                                       new test.py
         Movies
                                       nodePipe1827.sock
         Music
                                       nodePipe5558.sock
                                       node modules
         OneDrive - csu.edu.cn
         Parallels
                                       python work
         Pictures
                                       venv
         Public
                                       webui-aria2
```

```
In [44]: ! cat new_test.py
```

```
li = []
for i in range(1000):
    li.append(i**2)
```