nsd_1908_py01_day02

random模块基础

```
>>> import random
>>> random.choice('abcdefg')
'b'
>>> random.choice('abcdefg')
'f'
>>> random.choice('abcdefg')
'e'
>>> random.choice(['aaa', 'bbb', 'ccc'])
'ccc'
>>> random.choice(['aaa', 'bbb', 'ccc'])
'bbb'
```

range函数

- 生成数字

```
# 只给定一个数字，是结束数字。结束数字不包含，起始数字从0开始
>>> range(10)
range(0, 10)
>>> for i in range(10):
...     print(i)
>>> list(range(10))
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
>>> list(range(6, 11))
[6, 7, 8, 9, 10]
>>> list(range(1, 11, 2))    # 2是步长值
[1, 3, 5, 7, 9]
>>> list(range(10, 0, -1))
[10, 9, 8, 7, 6, 5, 4, 3, 2, 1]
```

列表解析：列表推导

- 用于生成列表

```
>>> [10]
[10]
>>> [10 + 5]  # 表达式计算结果放到列表中
[15]
>>> [10 + 5 for i in range(10)]  # 循环决定表达式计算的次数
[15, 15, 15, 15, 15, 15, 15, 15, 15, 15]
>>> [10 + i for i in range(1, 11)]  # 表达式可以使用循环的变量
```

```
[11, 12, 13, 14, 15, 16, 17, 18, 19, 20]
>>> [10 + i for i in range(1, 11) if i % 2 == 1]  # if作为过滤条件
[11, 13, 15, 17, 19]

>>> ['192.168.1.%s' % i for i in range(1, 11)]
['192.168.1.1', '192.168.1.2', '192.168.1.3', '192.168.1.4', '192.168.1.5', '192.168.1.6',
 '192.168.1.7', '192.168.1.8', '192.168.1.9', '192.168.1.10']
```