

03-XC

列表

Python列表

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PYTHON = Programmers Yearning To Homestead Our Noosphere.

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声明 + 倒置 + 排序

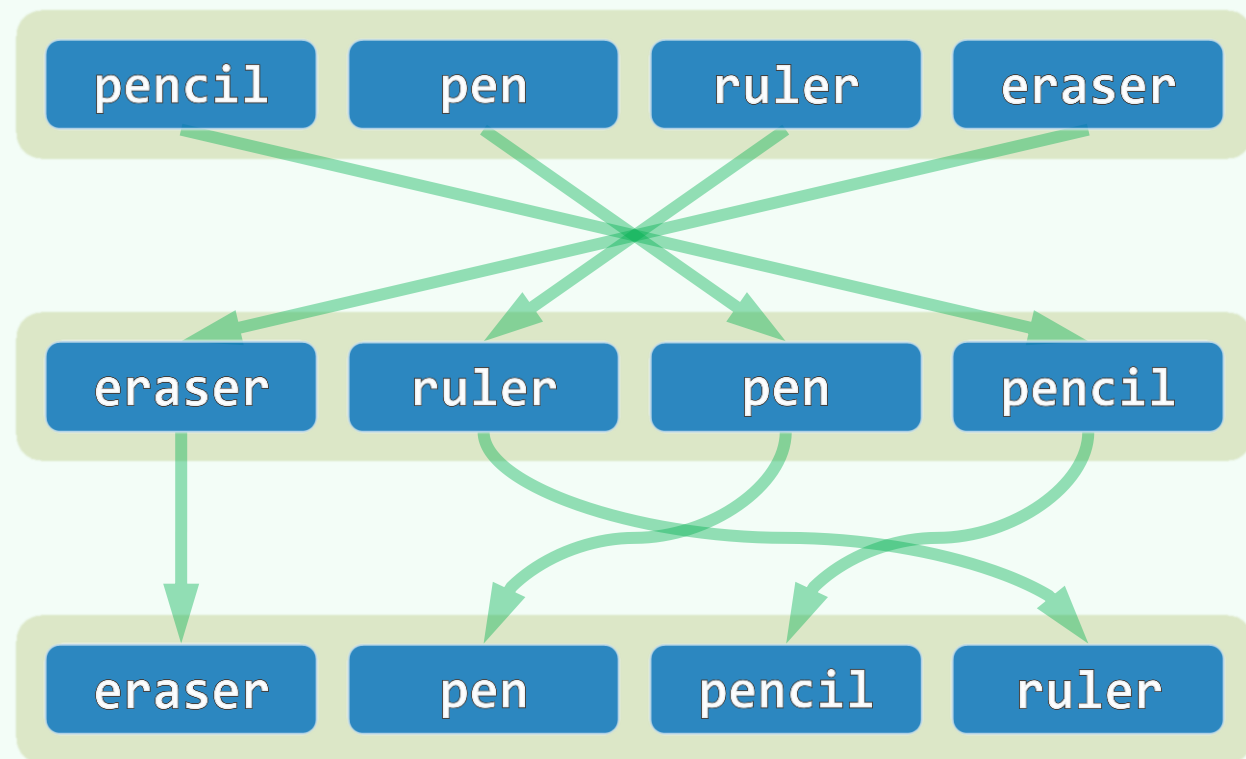
❖ 在Python中, List属于内置的标准数据类型

```
❖ box = [ 'pencil', 'pen', 'ruler', 'eraser' ]; print box  
# ['pencil', 'pen', 'ruler', 'eraser']
```

```
❖ for item in box: print item,  
# pencil pen ruler eraser
```

```
❖ box.reverse()  
for item in box: print item,  
# eraser ruler pen pencil
```

```
❖ box.sort()  
for item in box: print item,  
# eraser pen pencil ruler
```



区间遍历

```
❖ for i in range(0, len(box)): # [0, n)
    print box[i],

    # eraser pen pencil ruler

❖ for i in range(len(box)-1, -1, -1): # [n-1, -1)
    print box[i],

    # ruler pencil pen eraser

❖ for i in range(-1, -len(box)-1, -1): # [-1, -n-1)
    print box[i],

    # ruler pencil pen eraser
```

eraser

pen

pencil

ruler

集合遍历

❖ `bag = ['data structures', 'calculus', box, 2012012012]`

`print bag`

`# ['data structures', 'calculus',
['eraser', 'pen', 'pencil', 'ruler'], 2012012012]`

❖ `for item in bag: print item,`

`# data structures calculus`

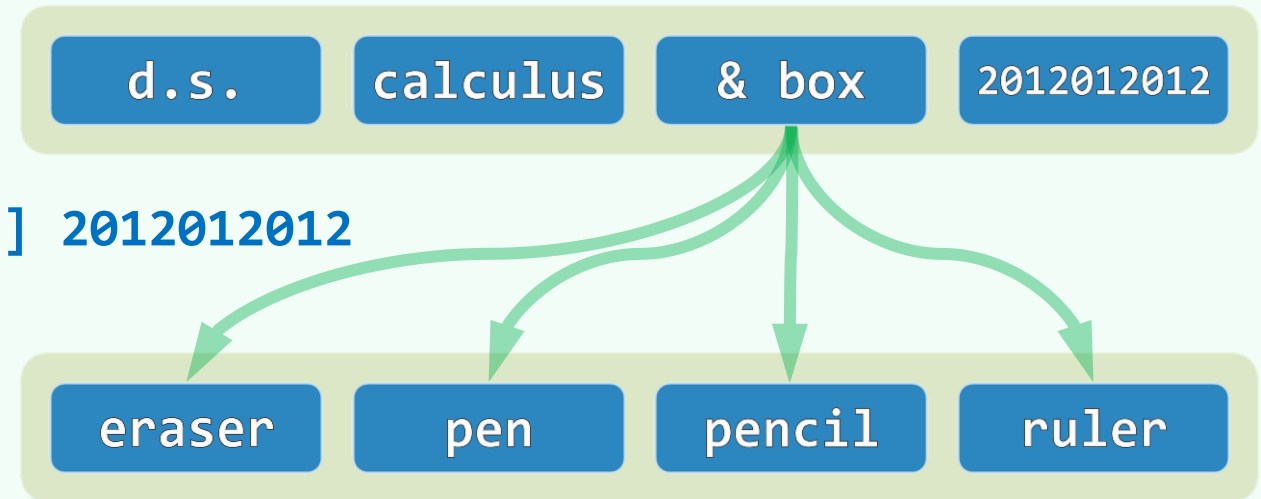
`['eraser', 'pen', 'pencil', 'ruler'] 2012012012`

❖ `for item in bag[2]: print item,`

`# eraser pen pencil ruler`

❖ `for item in bag[2][1:3]: print item,`

`# pen pencil`



reverse() : 秩 + 位置

❖ def reverse_1(L): # 循秩访问?

```
    lo, hi = 0, len(L) - 1
```

```
    while lo < hi:
```

```
        L[lo], L[hi] = L[hi], L[lo]
```

```
        lo, hi = lo + 1, hi - 1
```

```
    return L
```

❖ def reverse_2(L): # 循位置访问?

```
    for i in range( len(L) ):
```

```
        L.insert(i, L.pop())
```

```
    return L
```