

03 - XC

列表

Python列表

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PYTHON = Programmers Yearning To Homestead Our Noosphere.

声明 + 倒置 + 排序

❖ 在Python中，List属于内置的标准数据类型

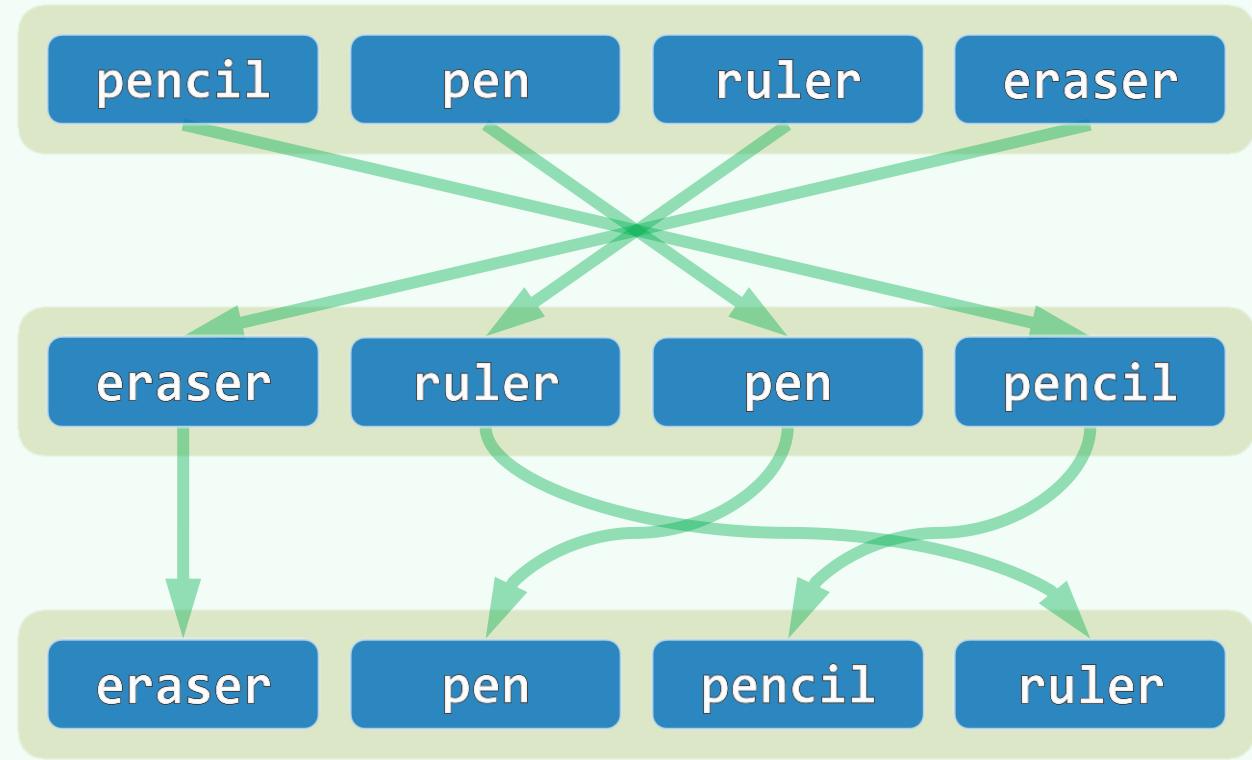
❖ `box = ['pencil', 'pen', 'ruler', 'eraser']; print box`

```
# ['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

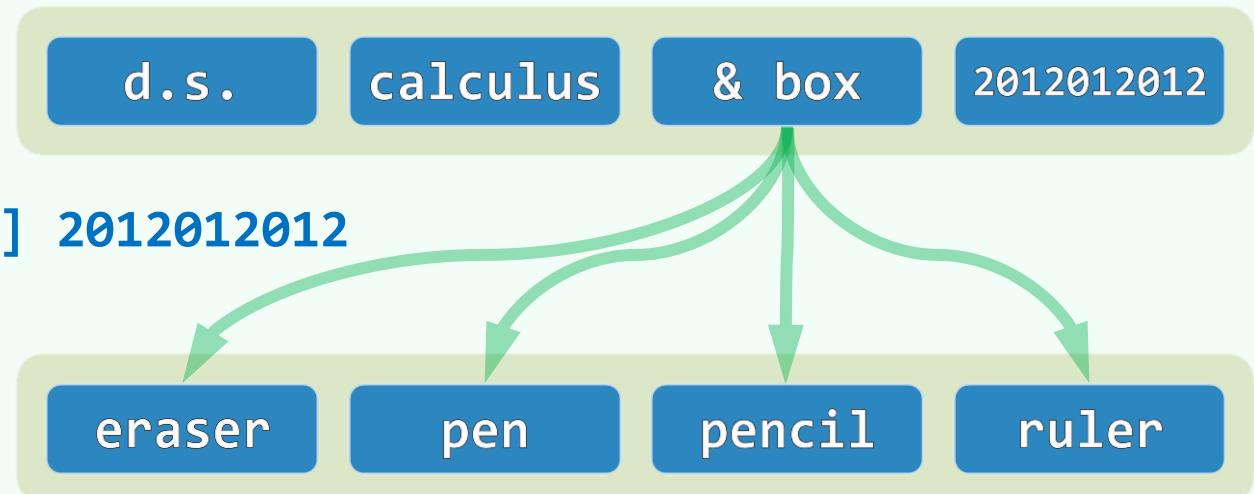
pen

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
```