03-XB

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),

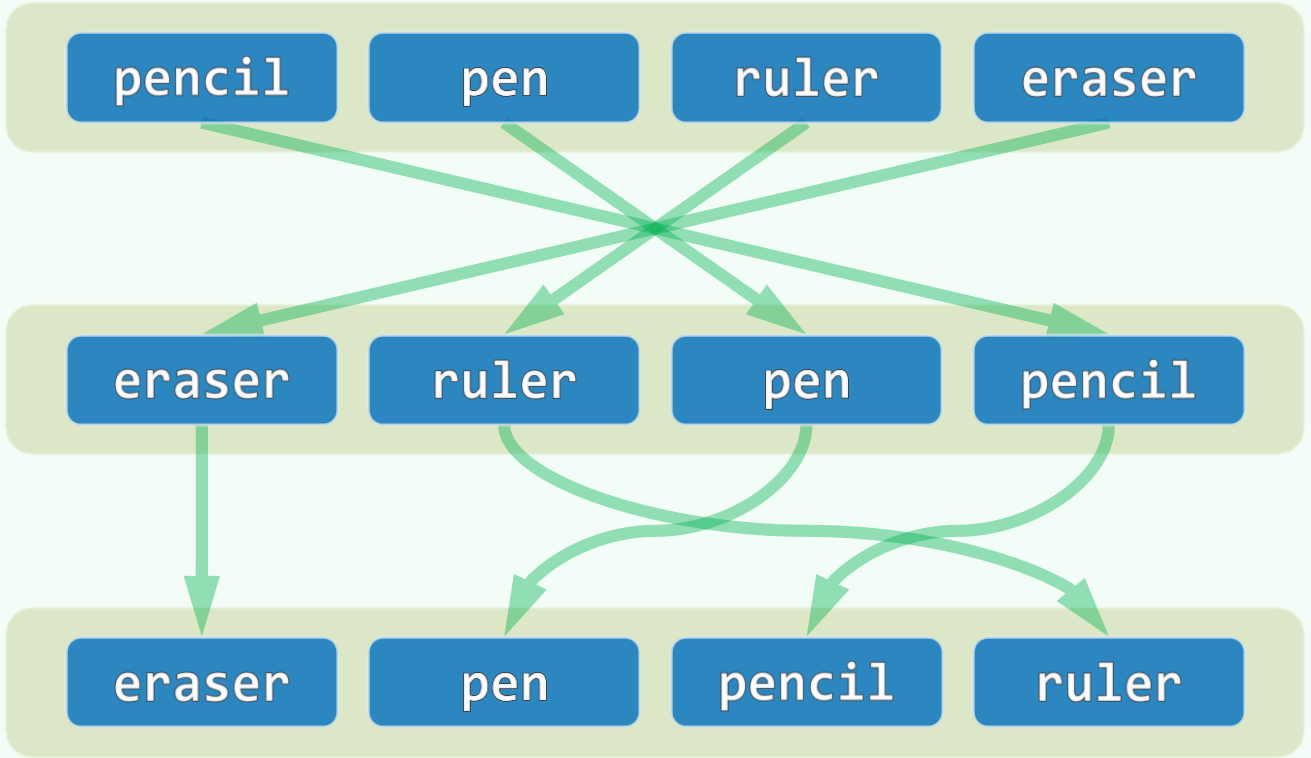
```
# pencil pen ruler eraser
```

- 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
```

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`

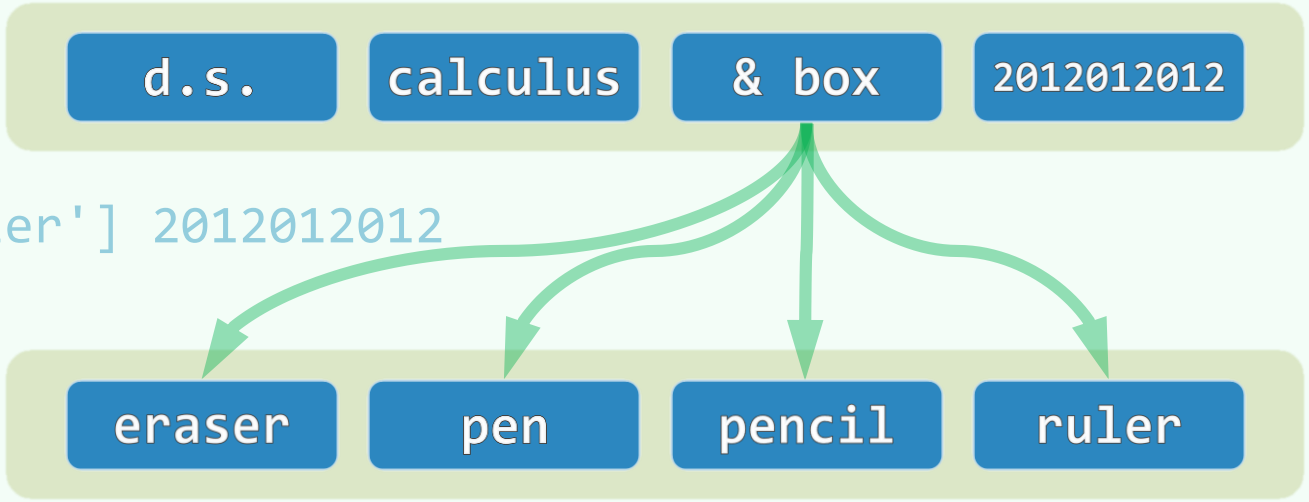
  `['eraser', 'pen', 'pencil', 'ruler'] 2012012012`

- `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
```