

第七周学习总结

三种初级排序算法实现：

```
def BubbleSort(self, arr):
    len = len(arr)
    i, j = 0, 0
    for i in range(len):
        for j in range(len):
            if arr[j] > arr[j+1]:
                arr[j], arr[j+1] = arr[j+1], arr[j]
            j += 1
        i += 1
    return arr

def InsertionSort(self, arr):
    len = len(arr)
    for i in range(1, len):
        preIndex = i-1
        current = arr[i]
        while preIndex >= 0 and arr[preIndex] > current:
            arr[preIndex+1] = arr[preIndex]
            preIndex--
        arr[preIndex + 1] = current
        i += 1
    return arr

def SelectionSort(self, arr):
    len = len(arr)
    for i in range(len-1):
        minIndex = i
        for j in range(i+1, len):
            if arr[j] < arr[minIndex]:
                minIndex = j
            j += 1
        arr[i], arr[minIndex] = arr[minIndex], arr[i]
        i += 1
    return arr
```