Q1Apply selection sort for the following list to sort it in ascending order. Record your answer for the first two passes.

80	29	73	43	97	52	Original
29	80	73	43	97	52	Pass 1
29	43	73	80	97	52	Pass 2

How many comparisons and exchanges are done in each pass of the selection sort algorithm?

Passes	Exchanges	Comparisons
Pass 1	1	5
Pass 2	1	4

Q2Apply bubble sort to the following list to sort it in ascending order. Record your answer for the first two passes.

80	29	73	43	97	52	Original
29	73	43	80	52	97	Pass 1
29	43	73	52	80	97	Pass 2

How many comparisons and exchanges are done in each pass of the bubble sort algorithm?

Passes	Exchanges	Comparisons
Pass 1	4	5
Pass 2	2	4

Q3 Record the values of the list data EACH TIME it changes

```
def insertionSort(data):
   for  index in range(1,len(data)):
      temp = data[index]
      position=index
      while position>0 and data[position-1]>temp:
         data[position]=data[position-1] #if item on left is greater copy right
         position=position-1
      data[position]=temp # insert temp at position
insertionSort([80,29,73,43])
```

index = 1 temp = 29
[29, 80, 73, 43]
index = 2 temp = 73
[29, 73, 80, 43]
index = 3 temp = 43
[29, 43, 73, 80]