Shoubra Faculty of Engineering **Computer Engineering Department**
Benha University **3rd year**

Data Structure: Assignment #7

Programming problems:

- Another simple sort is the odd-even sort. The idea is to repeatedly make two passes through the array. On the first pass you look at all the pairs of items, a[j] and a[j+1], where j is odd (j = 1, 3, 5, …). If their key values are out of order, you swap them. On the second pass you do the same for all the even values (j = 2, 4, 6, …). You do these two passes repeatedly until the array is sorted. Replace the bubbleSort() method with an oddEvenSort() method. Make sure it works for varying amounts of data. You'll need to figure out how many times to do the two passes.

Assignment Problem:

- The insertion sort uses a loop-within-a-loop algorithm that compares every item in the array with every other item. If you want to remove duplicates, this is one way to start. Modify the insertionSort() method so that it removes duplicates as it sorts