Practice 26 – DS-SE

Use following code in main for following tasks:

```
int main(){
    int length, i;
    srand(time(0));
    length = rand() % 11 + 5;
    int x [length];
    for (I = 0; I < length ; i++){
        x[i] = rand() % 101;
        printf ("%d ", x[i]);
    printf("\n");
```

Task 01: Write code to print adjacent pairs, which are in order (means first element is smaller than equal second element)

Sample Run:
23 45 18 17 36
Pairs in order:
23, 45
17, 36

Task 02: Create another list of same size with random numbers. Compare corresponding elements of both lists and for each pair print larger element.

Sample Run:
List 1: 23 45 18 17 36
List 2: 41 14 11 37 46
41 45 18 37 46

Task 03: Extend previous task. Compare corresponding elements of both lists and put smaller element in list 1 and larger elements in list 2 and print both lists again.

Sample Run:
List 1: 23 45 18 17 36
List 2: 41 14 11 37 46

Smaller: 23 14 11 17 36
Larger: 41 45 18 37 46

Task 04: For the list check and print, whether list is sorted or not. Note, you don't have to sort, just check adjacent pairs, if all adjacent pairs are in order, the list will be in order.

Sample Run:
23 45 18 17 36
List not sorted
12 23 35 48 57 76
List is sorted