Assignment-03

Q1: What is the difference between in-place and out-place sorting algorithms?

Ans1: An in-place sorting algorithm sorts the elements in place: that is, it needs only O(1) extra space. An out-of-place sorting algorithm needs extra space to put the elements in as it's sorting them. Usually this means O(n) extra space.

Q3: Suggest some practical examples of using in-place and out-place techniques.

Ans3: Since in-place takes no extra space it can be used in systems with less memory space or systems in Which memory consumption is high.

Where as out-place is used when we have to return the pointer of the array in any sorting algo.

Practical examples of in-place:

1.seating arrangement of a class.

2.parking of vehicles in a parking stand.

3.assembling of all the components in a circuit.