

An in-place sorting is sorting without using extra memory i.e. it sorts the elements in place, it needs only $O(1)$ extra space.

An out of place sorting also, needs extra space to put elements in as it is sorting them. i.e. $O(n)$ extra space is required.

Merge sort and quick sort falls in the category of out-of-place sorting while insertion sort and bubble sort falls in the category of in-place sorting.