|  |  |
| --- | --- |
| Bubble Sort | Selection Sort |
| Number of comparisons –  (n-1)+(n-2)+….+1 = n(n-1)/2  Nearly equals to n2 | **Number of comparisons –**  **(n-1)+(n-2)+….+1 = n(n-1)/2**  **Nearly equals to n2** |
| Number of swaps-  Adjacent elements are compared. If the adjacent elements are not at the correct position, swapping would be performed. | **Number of swaps-**  **Minimum element is selected from the array and swap with an element which is at the beginning of the unsorted sub array.** |
| Inplace and Outplace implementations-  Inplace algorithms as it requires O(1) extra space for swapping elements. | **Inplace and Outplace implementations-**  **Inplace algorithms as it requires O(1) extra space for swapping elements.** |

**Bubble sort**

**Selection sort**

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