Quiz 12

Analysis:

For bubble sort, the overall time performance is O (n ^ 2). The comparisons of keys are n ^ 2 / 2. The worst case of assignments of records are 3n ^ 2 / 2, the average case of assignments of records are 3n ^ 2 / 4.

For exchange sort. the overall time performance is O (n ^ 2). The comparisons of keys are n ^ 2 / 2. The worst case of assignments of records are 3n ^ 2 / 2, the average case of assignments of records are 3n ^ 2 / 4.

For insertion sort. the overall time performance is O (n ^ 2). The worst case of comparisons of keys are n ^ 2 / 2, the average case of comparisons of keys are n ^ 2 / 4. The worst case of assignments of records are n ^ 2 / 2, the average case of assignments of records are n ^ 2 / 4.

For selection sort, the overall time performance is O (n ^ 2). The comparisons of keys are n ^ 2 / 2. The assignments of records are 3n.