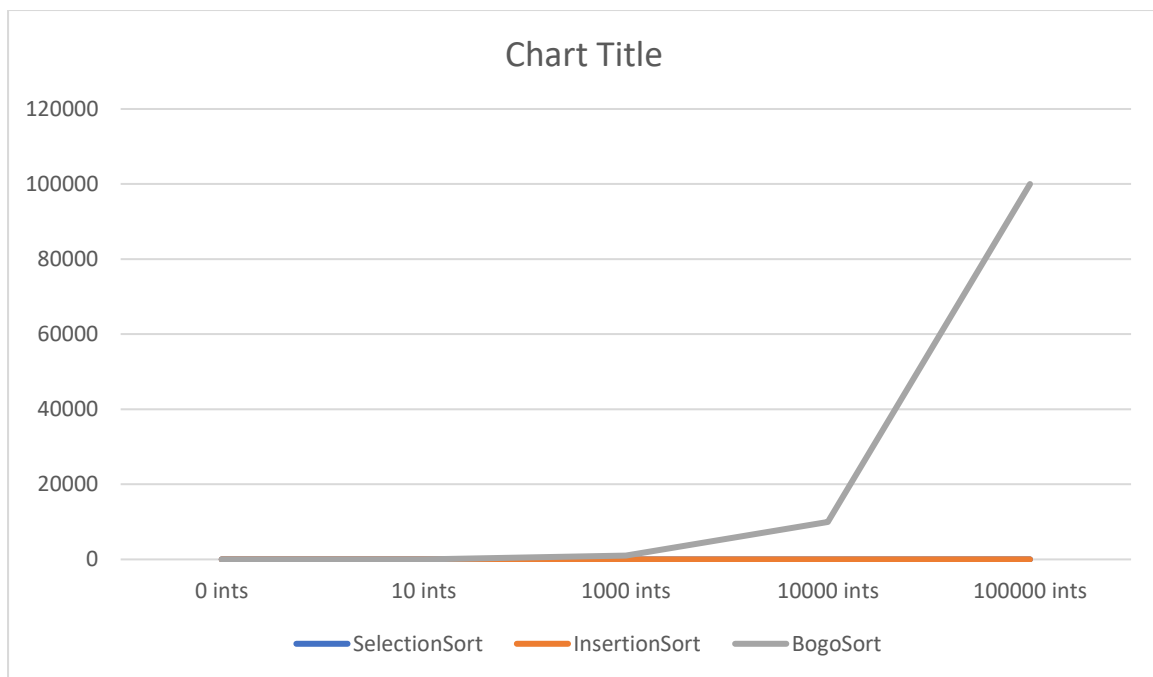


## Practical 4

### Quick Questions

1. Constant
2. A sorting algorithm that maintains the relative order of records with equal keys.
3. (A)
4.
  - a. Quick Sort
  - b. Bubble Sort
  - c. Merge Sort
  - d. Insertion Sort
  - e. Selection Sort
  - f. Heap Sort

### Algorithm Analysis



From this graph we can clearly see bogoSort is the least effective sorting method.

SelectionSort =  $O(n^2)$

InsertionSort =  $O(n^2)$

BogoSort =  $O((n+1)!)$