

Week-3

Ans 1 Algorithm

1. If it is the first element, it is already sorted, return 1.
2. Pick next element.
3. Compare with all elements in the sorted sub-list.
4. Shift all the element in the sorted sub-list is greater than the value to be sorted.
5. Insert the value.
6. Repeat until list is sorted.

Ans 2

1. Selection sort (arr, n)
2. Repeat step 2 and 3 for $i = 0$ to $n-1$.
3. Call smallest (arr, i , n, pos)
4. Swap arr[i] with arr[pos]
5. end of loop
6. end.
7. smallest (arr, i , n, pos)
8. set small = arr[i]
9. set pos = i
10. Repeat for $j = i+1$ to n
11. if (small > arr[j])
 set small = arr[j]
12. set pos = j
13. end of if
14. end of loop
15. return pos.