**Bubble Sort:**

for (int i = 0; i < n; i++) {

for (int j = 0; j < n - 1; j++) {

// Swap adjacent elements if they are in decreasing order

if (a[j] > a[j + 1]) {

swap(a[j], a[j + 1]);

}

}

}

**Selection Sort:**

**Algorithm**

**Step 1** − Set MIN to location 0

**Step 2** − Search the minimum element in the list

**Step 3** − Swap with value at location MIN

**Step 4** − Increment MIN to point to next element

**Step 5** − Repeat until list is sorted

**procedure selection sort**

list : array of items

n : size of list

for i = 1 to n - 1

/\* set current element as minimum\*/

min = i

/\* check the element to be minimum \*/

for j = i+1 to n

if list[j] < list[min] then

min = j;

end if

end for

/\* swap the minimum element with the current element\*/

if indexMin != i then

swap list[min] and list[i]

end if

end for

end procedure

**Binary Search:**

1. Compare x with the middle element.
2. If x matches with middle element, we return the mid index.
3. Else If x is greater than the mid element, then x can only lie in right half subarray after the mid element. So we recur for right half.
4. Else (x is smaller) recur for the left half.