

## C++ Assignments | Bubble Sorting | Week 9

- 1. Which of the following(s) is/are true about bubble sort:
  - 1. It is stable sort
    - 2. It has a worst case space complexity of O(n)
  - 3. It involves swapping of adjacent elements
  - 4. After each iteration, the greatest element is placed at the end of the array.
- 2. What will the following array look like after one iteration of bubble sort [1,6,2,5,4,3].
  - 1. [1,3,2,4,5,6]
  - 2. [1,2,3,4,5,6]
  - 3. [1,2,5,4,3,6]
  - 4. [1,2,4,5,3,6]
- 3. In which case does bubble sort works in the most efficient way:
  - 1. When the array is sorted in increasing order
  - 2. When the array is sorted partially
  - 3. When the array is sorted in decreasing order.
  - 4. When the array is nearly sorted.
- 4. Sort the array in descending order using Bubble Sort.
- 5. Check if the given array is almost sorted. (elements are at-most one position away)