**Home Work 3**

(**Note**: Submit the hand written code till 1:00pm tomorrow, in my office.)

Question:

Write a function that takes two **sorted** **arrays**, **arr1** & **arr2** of sizes **n** and **m** respectively, as parameters as returns a **sorted** **array**, **arr3**, of size **n+m** elements. The elements of **arr3** are the elements in **arr1** & **arr2**.

Assume all the arrays are in increasing order. **The list is sorted in increasing order**.

The Time Complexity of the function shall be Linear i.e. O(n).

Show the calculations for the Asymptotic Time Complexity of your code also.

**int \*Combine (int \* arr1, int \*arr2, int n, int m);**