## BLM1552 Assignment – 1 (Due 22/03/2016 – 23:59h)

## **Q1**

Design an **efficient** algorithm, which adds new given numbers into an sorted array without changing the sort order. Afterwards, write the necessary program in C.

**Inputs:**Number of elements of the sorted array

Number of elements which are to be added

Elements of the sorted array

Elements which are to be added

Output: An expanded sorted array (Use the same sorted array. Do not use a new array)

## **Examples**

Input: 5 2 1 3 5 7 9 2 8

Output: 1 2 3 5 7 8 9

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Input: 4
3
-1 0 5 8
-5 9
Output: -5 -1 0 5 8 9

## **ATTENTION**

Do not forget to read the document "ASSIGNMENT RULES", located in our website.