

<http://bit.ly/1VVql7C>

Start time: 12:00 PM

End time: 1:00 PM

Problem:

1. Take input two sorted array A & B.  $|A| = n$  and  $|B| = m$ ; **[2 marks]**

Input	Output
4 0 1 4 7 3 -2 2 8	-2 0 1 2 4 7 8
3 1 4 5 2 -2 -1	-2 -1 1 4 5

2. Write a function `void f(int A[], int n, int B[], int m, int C[])` that will take two sorted array and merge them in another array C. Condition is the merged array should also be a sorted one. **[7 marks]**

[don't do any input/ output in this function]

```
A = [1, 3, 5, 7, 12];  
B = [0, 0, 2, 3, 4, 5, 6, 14];  
C = [0, 0, 1, 2, 3, 3, 4, 5, 5, 6, 7, 12, 14];
```

And make sure C has enough space to accommodate  $n+m$  elements.

3. Print the Array C. **[1 marks]**

4. Can you do it without any additional array C. Write a function **[2 marks bonus]**  
`g(int A[], int n, int B[], int m)`

This function will modify A so that A will contain the merge of A & B in a sorted form.  
And make sure A has enough space to accommodate n+m elements.