Microsoft PPI interview questions

Round 1

1. How will you implement C++ STL Map
2. Given a binary tree, the weight of a node is the number of nodes in the subtree rooted by that node.
For each node, make its value equal to weight of left subtree - weight of right subtree.

Round 2

1. Given n sorted arrays, find the intersection. How will you optimize if
    a) The arrays are not sorted, but the elements of array are contiguous
    b) The intersection is assured to be small (use binary search)

Round 3

1. Convert binary search tree to DLL in sorted order.
2. Given two strings s1 and s2, find the smallest substring in s1 which contains all the characters of s2.

Round 4

1. Given two arrays, find the pairs of elements with difference K.

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