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CMPT 435 - Assignment #10

1)

a) Loop for i less than s2's size

 Add the index of s2 to the set

 Loop for i less than s1's size

 If the set contains i in s1, then print it

b) for (i = 0; i < s2.length; i++) // n

 s.add(s2[i]) // 1

 for (i = 0; i < s1.length; i++) // n

 if (s.contains(s1[i])) { **Output:** print() } // 1

c) $O(n) = n$

2)

a) Loop while i is less than s1's size and j is less than s2's size

 Base Case: if s1[i] is equal to s2[j], increment s1 at i

 General Cases: else if s2[j] is less than s1[i], increment s2 at j

 else if s2[j] is greater than s1[i], increment s2 at j and i

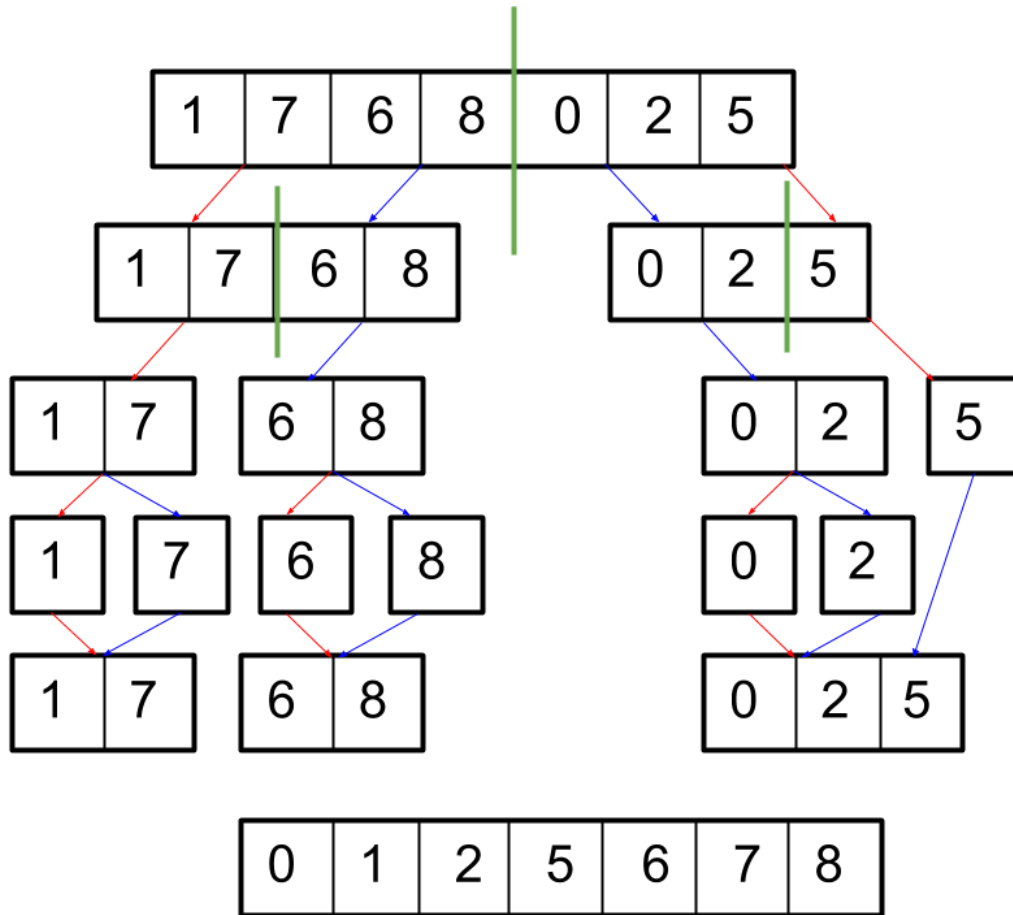
b) while (s1[i] < s1.length && s2[j] < s2.length) // n

 if (s1[i] == s2[j]) { **Output:** print(s1[i++] + " ") } // 1

 else if (s2[j] < s1[i]) { **Output:** print(s2[j++] + " ") } // 1

 else { **Output:** print(s2[j++] + " ", i++) } // 1

c) $O(n) = n$



3)