

Challenge: Implement Merge Sort


The mergeSort function should recursively sort the subarray **array[p..r]** i.e. after calling mergeSort(array,p,r) the elements from index p to index r of array should be sorted in ascending order.


To remind you of the merge sort algorithm:


-If the subarray has size 0 or 1, then it's already sorted, and so nothing needs to be done.


-Otherwise, merge sort uses divide-and-conquer to sort the subarray.

Use **merge(array, p, q, r)** to merge sorted sub arrays **array[p..q]** and **array[q+1..r]**.

 Java

 Python

 C++

 JS

```
1 class Solution {
2     // Takes in an array that has
3     // from [p..q] and [q+1..r]
4     static void merge(int array[
5         // This code has been pu
6         // as you'll write it yo
7         int i, j, k; int n1 = q
8     }
9
10    // Takes in an array and recu
11    public static void mergeSort
12    // Write this method
13
14
15    };
16 }
```

