## Challenge: Implement Merge

The merge function should merge the sorted subarrays in array[p..q] and array[q+1..r] into a single sorted subarray in array[p..r]. The function starts by allocating two temporary arrays, lowHalf and highHalf, and copying array[p..q] into lowHalf and array[q+1..r] into highHalf.

You should complete the function:

- -Make it repeatedly compare the lowest untaken element in lowHalf with the lowest untaken element in highHalf and copy the lower of the two back into array, starting at array[p].
- -Once one of lowHalf and highHalf has been fully copied back into array, the remaining elements in the other temporary array are copied back into array.

Note: use indexes i,j and k to access elements in lowHalf,highHalf,and array.

