```
public class MergeSort {

        static void merge(int arr[],int le ,int mid,int ri) {
            int l=mid-le+1;  // length of splited array
            int r=ri-mid;
            int larr[]=new int[l];
            int rarr[]=new int[r];

            for(int i=0;i<l;++i) { // just inserting the elements in the temp array
                larr[i]=arr[le+i];
            }
            for(int j=0;j<r;++j) {
                rarr[j]=arr[mid+1+j];
            }

            int i=0,j=0,k=le;
            // to compare both the temp array and swap
            while(i<l && j<r) {
                if(larr[i]<=rarr[j]) {
                    arr[k]=larr[i];
                    i++;
                }else {
                    arr[k]=rarr[j];
                    j++;
                }
                k++;
            }
            // for swapping
            while(i<l) {
                arr[k]=larr[i];
                i++;
                k++;
```

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                }while(j<r) {
                        arr[k]=rarr[j];
                        j++;
                        k++;
                }

        }
        // to split the array
        static void sort (int arr[],int le,int ri) {
                if(le<ri) {
                        int mid=(le+ri)/2;
                        sort(arr,le,mid);
                        sort(arr,mid+1,ri);
                        merge(arr,le,mid,ri);
                }
        }
    public static void main(String[] args) {
        int a[]={10,20,30,60,50,60,0};
        sort(a,0,a.length-1);

        System.out.println(Arrays.toString(a));
    }

}
```