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import java.util.*;
class Main {
    public static void main(String args[]) {
        int[] arr = {1, 3, 9, 6, 7};
        bubbleSortOnFactors(arr);
        System.out.println(Arrays.toString(arr));
    }

    public static void bubbleSortOnFactors(int[] arr) {
        int n = arr.length;
        for (int i = 1; i <= n - 1; i++) {
            for (int j = 0; j <= n - 1 - i; j++) {
                if (compareDec(arr[j], arr[j + 1]) > 0) {
                    swap(arr, j, j + 1);
                }
            }
        }
    }

    public static int coutFactors(int n) {
        int cnt = 0;
        for (int i = 1; i <= n; i++) {
            if (n % i == 0) {
                cnt++;
            }
        }
        return cnt;
    }

    public static int compareIncr(int a, int b) {
        int factorsA = coutFactors(a);
        int factorsB = coutFactors(b);

        if (factorsA > factorsB) {
            return 1;
        } else if (factorsA < factorsB) {

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        return -1;
    }
    return 0;
}

public static int compareDec(int a, int b) {
    int factorsA = coutFactors(a);
    int factorsB = coutFactors(b);

    // arr[j] < arr[j + 1]
    // arr[j] - arr[j + 1] < 0
    if (factorsA > factorsB) {
        return -1;
    } else if (factorsA < factorsB) {
        return 1;
    }
    return 0;
}

public static void swap(int[] arr, int i, int j) {
    int temp = arr[i];
    arr[i] = arr[j];
    arr[j] = temp;
}

// Sort an array on basis of factors
// arr[] = {1, 3, 9, 6, 7};
// arr[] = {1, 3, 7, 9, 6};
}

```