**Assignment 3**

import java.util.Arrays;

import java.util.Collections;

import java.util.List;

import java.util.ArrayList;

public class Main {

public static void arraySort(int[] arr) {

List<Integer> odd = new ArrayList<>();

List<Integer> even = new ArrayList<>();

for (int i = 0; i < arr.length; i++) {

if (arr[i] % 2 == 0) {

even.add(arr[i]);

}

else {

odd.add(arr[i]);

}

}

Collections.sort(even, Collections.reverseOrder());

Collections.sort(odd, Collections.reverseOrder());

int i = 0;

for (int j = 0; j < even.size(); j++) {

arr[i] = even.get(j);

i++;

}

for (int j = 0; j < odd.size(); j++) {

arr[i] = odd.get(j);

i++;

}

}

public static void main(String[] args) {

int[] arr = { 3, 2, 5, 1, 8, 9, 6 };

arraySort(arr);

for (int i = 0; i < arr.length; i++) {

System.out.print(arr[i] + " ");

}

}

}

