

Q10.

In this problem, you need to implement a heap sort algorithm.

You must use the template to do this lab.

**DO NOT use any sort functions from the standard or other libraries.
If you use other ways to sort, your score will be 0.**

Input Format

Each line of inputs contains a different number of elements.

Output Format

Show the sorted element in increasing order.

Sample Input

```
10 9 8 7 6 5 4 3 2 1
69 -52 47 36 -19 58 25 -30 14 -74 -8 3 -85 -63 -41
```

Sample Output

```
1 2 3 4 5 6 7 8 9 10
-85 -74 -63 -52 -41 -30 -19 -8 3 14 25 36 47 58 69
```