```c
1: #include<stdlib.h>
2: #include<stdio.h>
3: #define MAX 15
4: void heapify(int arr[], int n, int i)
5: {
6:     int parent = (i - 1) / 2;
7:     if (arr[parent] > 0)
8:     {
9:
10:         if (arr[i] < arr[parent]) {
11:             int temp=arr[parent];
12:             arr[parent]=arr[i];
13:             arr[i]=temp;
14:             heapify(arr, n, parent);
15:         }
16:     }
17: }
18: void insertNode(int arr[], int n, int Key)
19:  {
20:     n = n + 1;
21:     arr[n - 1] = Key;
22:     heapify(arr, n, n - 1);
23:  }
24: void printArray(int arr[], int n)
25: {
26:     for (int i = 0; i < n; ++i)
27:       if(arr[i]!=0)
28:         printf("%d\t",arr[i]);
29: }
30: int main()
31: {
32:     int arr[MAX] = {10};
33:     int n =1;
34:     int n1=MAX;
35:     int key = 15;
36:     insertNode(arr, n, key);
37:     insertNode(arr,n+1,50);
38:     insertNode(arr,n+2,20);
39:     insertNode(arr,n+3,80);
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40:        insertNode(arr,n+4,30);
41:        printArray(arr, n1);
42:        return 0;
43: }
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