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