

## Convert Minheap to Maxheap

```
#include <stdio.h>
#include <stdlib.h>

void swap(int heap[], int a, int b)
{
    int temp;
    temp = heap[a];
    heap[a] = heap[b];
    heap[b] = temp;
}

void MaxHeapify(int heap[], int index, int size)
{
    int left = 2*index + 1, right=2*index+2, greatest=index;
    greatest = (left<size && heap[left]>heap[index])? left: index;
    if (right < size && heap[right]>heap[greatest])
        greatest = right;
    if (greatest != index)
    {
        swap(heap, index, greatest);
        MaxHeapify(heap, greatest, size);
    }
}

void convertToMaxHeap(int heap[], int size)
{
    for(int i=(size/2)-1; i >= 0; i--)
        MaxHeapify(heap, i, size);
}

void printMaxHeap(int heap[], int size)
{
    for(int i=0; i<size; i++)
        printf("%d\t", heap[i]);
}

int main()
{
    int *heap, size;
    printf("Enter size of the heap");
    scanf("%d", &size);
    printf("Enter elements to heap\n");
    for(int index = 0; index< size; index++)
        scanf("%d", &heap[index]);
    convertToMaxHeap(heap, size);
    printMaxHeap(heap, size);
    return 0;
}
```