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#include<iostream>
using namespace std;
class Heap
{
    int n;
    int *minheap,*maxheap;
public:
    void get();
    void displayMin(){cout<<"Minimum marks are : "<<minheap[0]<<endl;}
    void displayMax(){cout<<"Maximum marks are : "<<maxheap[0]<<endl;}
    void upAdjust(bool,int);
};

void Heap::get()
{
    cout<<"Enter number of students."<<endl;
    cin>>n;
    int k;
    minheap=new int[n];
    maxheap=new int[n];
    cout<<"Enter marks of students."<<endl;
    for(int i=0;i<n;i++)
    {
        cin>>k;
        minheap[i]=k;
        upAdjust(0,i);
        maxheap[i]=k;
        upAdjust(1,i);
    }
}

void Heap::upAdjust(bool m,int l)
{
    int s;
    if(!m)
    {
        while(minheap[(l-1)/2]<minheap[l])
        {
            s=minheap[l];
            minheap[l]=minheap[(l-1)/2];
            minheap[(l-1)/2]=s;
            l=(l-1)/2;
            if(l==-1)
                break;
        }
    }
    else
    {
        while(maxheap[(l-1)/2]>maxheap[l])
        {
            s=maxheap[l];

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        maxheap[l]=maxheap[(l-1)/2];
        maxheap[(l-1)/2]=s;
        l=(l-1)/2;
        if(l==-1)
            break;
    }
}
main()
{
    Heap H;
    H.get();
    H.displayMin();
    H.displayMax();
    return(0);
}
```