**INPUT**

#include <iostream>

#include <conio.h>

using namespace std;

void max\_heapify(int \*a, int i, int n)

{

int j, temp;

temp = a[i];

j = 2 \* i;

while (j <= n)

{

if (j < n && a[j+1] > a[j])

j = j + 1;

if (temp > a[j])

break;

else if (temp <= a[j])

{

a[j / 2] = a[j];

j = 2 \* j;

}

}

a[j/2] = temp;

return;

}

void build\_maxheap(int \*a,int n)

{

int i;

for(i = n/2; i >= 1; i--)

{

max\_heapify(a,i,n);

}

}

int main()

{

int n, i, x;

cout<<"enter no of elements of array\n";

cin>>n;

int a[20];

for (i = 1; i <= n; i++)

{

cout<<"enter element"<<(i)<<endl;

cin>>a[i];

}

build\_maxheap(a,n);

cout<<"Max Heap\n";

for (i = 1; i <= n; i++)

{

cout<<a[i]<<endl;

}

getch();

}

**OUTPUT**

