#include <iostream>

#define max 100

using namespace std;

class mar

{

public:

int arr[max], temp, n, left, right, largest,z;

void create();

void hfy(int);

};

void mar::hfy(int i)

{

right = 2 \* i + 2;

left = 2 \* i + 1;

largest = i;

if (left < n && arr[left] > arr[largest])

{

largest = left;

}

if (right < n && arr[right] > arr[largest])

{

largest = right;

}

if (i != largest)

{

temp = arr[i];

arr[i] = arr[largest];

arr[largest] = temp;

hfy(largest);

}

}

void mar::create()

{

cout << "Enter the number of students:=" << endl;

cin >> n;

for (int i = 0; i < n; i++)

{

cout << "Enter the marks for student no." << i + 1 << " :=" << endl;

cin >> arr[i];

}

for (int i = (n / 2) - 1; i >= 0; i--)

{

hfy(i);

}

z=n;

for(int i=n-1;i>=0;i--){

temp=arr[i];

arr[i]=arr[0];

arr[0]=temp;

n--;

hfy(0);

}

cout<<"Maximum marks obtained in the subject:="<<endl;

cout<<arr[z-1]<<endl;

cout<<"Minimum marks obtained in the subject:="<<endl;

cout<<arr[0]<<endl;

}

int main()

{

mar ab;

ab.create();

return 0;

}