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//Write a program to find minimum and maximum from a given array.

```cpp
#include<iostream>
#include<cmath>
using namespace std;
class MaxMinDemo
{
    int A[16];
    int n;
    int fmax, fmin;
public:
    void getData()
    {
        cout << "enter the number of elements:";
        cin >> n;
        cout << "Enter the elements:";
        for (int i = 0; i < n; i++)
        {
            cin >> A[i];
        }
    }
    void MaxMin()
    {
        HMaxMin(0, n - 1, fmax, fmin, A);
    }
```

```cpp
    void Display()
    {
        cout << "Given array is:";
        for (int i = 0; i <= n; i++)
        {
            cout << A[i] << " ";
        }
        cout << endl;
        cout << "\n Max:" << fmax << "\n Min:" << fmin;
    }
    void HMaxMin(int i, int j, int& fmax, int& fmin, int A[]);
};
void MaxMinDemo::HMaxMin(int i, int j, int& fmax, int& fmin, int A[])
{
    if (i == j)
    {
        fmax = fmin = A[i];
    }
    else if (i == j - 1)
    {
        if (A[i] > A[j])
        {
            fmax = A[i];
```

```cpp
                fmin = A[j];
        }
        else
        {
                fmax = A[j];
                fmin = A[i];
        }
    }
    else
    {
        int mid = (i + j) / 2;
        int gmax, gmin;
        HMaxMin(i, mid, gmax, gmin, A);
        int hmax, hmin;
        HMaxMin(mid + 1, j, hmax, hmin, A);
        fmax = max(gmax, hmax);
        fmin = min(gmin, hmin);
    }
}
int main()
    {
        MaxMinDemo o;
        o.getData();
        o.MaxMin();
        o.Display();
```

```
        return 0;
    }
```

Output:

enter the number of elements:5

Enter the elements:34

67

8

33

29

Given array is:34 67 8 33 29 6422280

Max:67

Min:8