```cpp
#include <iostream>
#include <algorithm>
using namespace std;

int main()
{
    int n,m,i,l,r;
    ios::sync_with_stdio(false);

    cin>>n;
    int a[n];

    for(i=0;i<n;i++) cin>>a[i];

    cin>>m;
    for(i=0;i<m;i++)
    {
        int x;
        cin >> x;       //10
        if(x<=a[0])
            cout<<a[0]<<endl;
        else if( x>=a[n-1])
            cout<<a[n-1]<<endl;
        else {
            int *p;
            p=lower_bound(a,a+n,x);
            r=*p;
            l=*(p-1);
            if( (x-l)<=(r-x) )
                cout<<l<<endl;
            else
                cout<<r<<endl;
        }
    }

    return 0;
}
```