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#include <iostream>
#include <time.h>
#include "sortlib.h"

using namespace std;

const int LOW = 1;
const int HIGH = 1000;
const int NUM_DATA = 50000;

int main(void) {
    int data[NUM_DATA], i;
    time_t seed;

    time(&seed);
    srand((unsigned int) seed);

    for (i = 0 ; i < NUM_DATA ; i++) {
        data[i] = rand() % (HIGH - LOW + 1) + LOW;
    }

    for (i = 0 ; i < NUM_DATA-1 ; i++) {
        cout << data[i] << ", ";
    }
    cout << data[i] << "\n\n";

    Quick(data, NUM_DATA);
    cout << "Quick Sort" << "\n";

    //Merge(data, NUM_DATA);
    //cout << "Merge Sort" << "\n";

    //Shell(data, NUM_DATA);
    //cout << "Shell Sort" << "\n";

    //Selection(data, NUM_DATA);
    //cout << "Selection Sort" << "\n";

    //Bubble(data, NUM_DATA);
    //cout << "Bubble Sort" << "\n";

    //Insertion(data, NUM_DATA);
    //cout << "Insertion Sort" << "\n";

    for (i = 0 ; i < NUM_DATA-1 ; i++) {
        cout << data[i] << ", ";
    }
    cout << data[i] << "\n";
    return 0;
}

```