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// sample4_1cio.cpp : コンソール アプリケーションのエントリ ポイントを定義します。
//

#include "stdafx.h"

#include <iostream>
#include <string>
#include <cmath>          //      数学関数の使用

using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{
    double x[100];
    double c;
    cout << "基準値 = ";
    cin >> c;
    int n = -1;
    while (true) {
        n++;
        cout << "data-" << n+1 << " = ";
        cin >> x[n];
        if (x[n] < c) break;
    }
    if (n < 1) return 0;
    double sum = 0.0, ssum = 0.0;
    for (int i = 0; i < n; i++){
        sum += x[i];
        ssum += x[i] * x[i];
    }
    cout << endl << "入力データ..." << endl;
    for (int i = 0; i < n; i++)
        cout << "データ-" << i+1 << " = " << x[i] << endl;

    double mean = sum / n;
    double var = (ssum - n * mean * mean) / n;
    double sd = sqrt(var);
    double uvar = var * n / (n - 1.0);
    double sd_uvar = sqrt(uvar);
    cout << endl << "平均値 = " << mean << endl;
    cout << "分散 = " << var << endl;
    cout << "標準偏差 = " << sd << endl;
    cout << "不偏分散 = " << uvar << endl;
    cout << "不偏分散の平方根 = " << sd_uvar << endl;

    cout << endl << "何か文字を入力して終了。" << endl;
    string s;
    cin >> s;
    return 0;
}
```