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// sample4_2.cpp : メイン プロジェクト ファイルです。

#include "stdafx.h"

using namespace System;

int main(array<System::String ^> ^args)
{
    double x[100];
    double c;
    Console::Write("基準値 = ");
    c = double::Parse(Console::ReadLine());
    int n = -1;
    while (true) {
        n++;
        Console::Write("data-" + (n+1).ToString() + " = ");
        x[n] = double::Parse(Console::ReadLine());
        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];
    }
    Console::WriteLine();
    Console::WriteLine("入力データ...");
    for (int i = 0; i < n; i++)
        Console::WriteLine("データ-" + (i+1).ToString() + " = " + x[i].ToString());

    double mean = sum / n;
    double var = (ssum - n * mean * mean) / n;
    double sd = Math::Sqrt(var);
    double uvar = var * n / (n - 1.0);
    double sd_uvar = Math::Sqrt(uvar);
    Console::WriteLine();
    Console::WriteLine("平均値 = " + mean.ToString());
    Console::WriteLine("分散 = " + var.ToString());
    Console::WriteLine("標準偏差 = " + sd.ToString());
    Console::WriteLine("不偏分散 = " + uvar.ToString());
    Console::WriteLine("不偏分散の平方根 = " + sd_uvar.ToString());

    Console::WriteLine();
    Console::WriteLine("Enterキーを押して終了。");
    Console::ReadLine();
    return 0;
}
```