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Windows does not support user defined reductions.

This program may not run on MVSC++ compilers for Windows.

Please use Linux Environment.[You can try using "windows subsystem for linux"]

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#include<iostream>

#include<omp.h>

using namespace std;

int minval(int arr[], int n){

int minval = arr[0];

#pragma omp parallel for reduction(min : minval)

for(int i = 0; i < n; i++){

if(arr[i] < minval) minval = arr[i];

}

return minval;

}

int maxval(int arr[], int n){

int maxval = arr[0];

#pragma omp parallel for reduction(max : maxval)

for(int i = 0; i < n; i++){

if(arr[i] > maxval) maxval = arr[i];

}

return maxval;

}

int sum(int arr[], int n){

int sum = 0;

#pragma omp parallel for reduction(+ : sum)

for(int i = 0; i < n; i++){

sum += arr[i];

}

return sum;

}

int average(int arr[], int n){

return (double)sum(arr, n) / n;

}

int main(){

int n = 5;

int arr[] = {1,2,3,4,5};

cout << "The minimum value is: " << minval(arr, n) << '\n';

cout << "The maximum value is: " << maxval(arr, n) << '\n';

cout << "The summation is: " << sum(arr, n) << '\n';

cout << "The average is: " << average(arr, n) << '\n';

return 0;

}