

```

#include <iostream>
#include <omp.h>
#include <climits>

using namespace std;

void min_reduction(int arr[], int n)
{
    int min_value = INT_MAX;
    #pragma omp parallel for reduction(min: min_value)

    for (int i = 0; i < n; i++)
    {
        if (arr[i] < min_value)
        {
            min_value = arr[i];
        }
    }
    cout << "Minimum value: " << min_value << endl;
}

void max_reduction(int arr[], int n)
{
    int max_value = INT_MIN;
    #pragma omp parallel for reduction(max: max_value)
    for (int i = 0; i < n; i++)
    {
        if (arr[i] > max_value)
        {
            max_value = arr[i];
        }
    }
    cout << "Maximum value: " << max_value << endl;
}

void sum_reduction(int arr[], int n)
{
    int sum = 0;
    #pragma omp parallel for reduction(+: sum)
    for (int i = 0; i < n; i++)
    {
        sum += arr[i];
    }
    cout << "Sum: " << sum << endl;
}

void average_reduction(int arr[], int n)
{
    int sum = 0;
    #pragma omp parallel for reduction(+: sum)
    for (int i = 0; i < n; i++)
    {
        sum += arr[i];
    }
    cout << "Average: " << (double)sum / (n-1) << endl;
}

int main()
{
    int *arr, n;
    cout << "\n enter total no of elements=>";
    cin >> n;
    arr = new int[n];
    cout << "\n enter elements=>";
    for (int i = 0; i < n; i++)
    {
        cin >> arr[i];
    }
    min_reduction(arr, n);
    max_reduction(arr, n);
}

```

```
sum_reduction(arr, n);  
average_reduction(arr, n);  
}
```