**作业 （刘冲 21190231370）**

代码：

#include <iostream>

#include <omp.h>

#include <time.h>

using namespace std;

int main(int argc,char\* argv[])

{

int NUM\_THREADS;

cout << "选择并行线程数（1，2，3，4，5）：" << endl;

cin >> NUM\_THREADS;

int NUM\_MILLION;

cout << "选择累加至几百万（1，2，4，8，10）：" << endl;

cin >> NUM\_MILLION;

omp\_set\_num\_threads(NUM\_THREADS);

long long sum = 0;

clock\_t t1 = clock();

#pragma omp parallel for reduction(+:sum)

for (long i = 1; i <= (NUM\_MILLION\*1000000); i++)

{

sum = sum + i;

}

clock\_t t2 = clock();

cout << "sum = " << sum << endl;

cout << "parallel time = " << (t2 - t1) << endl;

/\*sum = 0;

t1 = clock();

for (long i = 1; i <= 1000000000; i += 1)

sum = sum + i;

t2 = clock();

printf("sum=%lld\n", sum);

printf("serial time=%d\n", (t2 - t1));\*/

system("pause");

return 0;

}

图表：

