Parallel Programming CS-575 - Project 0

Name: Venkata Vasantha Phani Sai Paramkusham

Email: paramkuv@oregonstate.edu

Project name: Project0

1. Tell what machine you ran this on

   Ans) Flip2 Server flip2.engr.oregonstate.edu

2. What performance results did you get?

   Ans)

```
[paramkuv@flip2 ~/Windows.Documents/Desktop/Parllel Programing$] g++ -fopenmp Project.c -o proto
[paramkuv@flip2 ~/Windows.Documents/Desktop/Parllel Programing$] ./proto
Using 4 threads
Peak Performance =  1083.95 MegaMults/Sec
Using 1 threads
Peak Performance =   300.89 MegaMults/Sec

 p4=1083.947392
 p1=300.889338
 Speed=3.602479
 Fp=0.963218
[paramkuv@flip2 ~/Windows.Documents/Desktop/Parllel Programing$]
```

   Performance with the four threads is 1083.95 MegaMults/Sec

   Performance with the one thread is 300.89 MegaMults/Sec

3. What was your 4-thread-to-one-thread speedup?

   Ans) The speedup from the four threads to one thread is 3.602479

4. If the 4-thread-to-one-thread speedup is less than 4.0, why do you think it is this way?

   Ans) The thread speedup is 3.6, which is less than four because:

   - Flip server is the shared server for EECS. Because of this, many students run their executions on the flip server, which causes variation in the performance of the tasks

5. What was your Parallel Fraction, Fp?

   Ans) Fp= 0.963218