

CMPE 478: Parallel Processing
Spring 2020, Homework 1 (due: March 23rd)
(This project can be done in groups of at most 2 students)

Implement an OpenMP program that generates prime numbers in the interval [2..M]. You should use the prime generation method given below (Do NOT use other method ! If you use other method, you will get 0 credit).

Your program should generate a csv file called results.csv that reports the timing results in the following format.

M	Openmp Loop Scheduling Method	Chunk Size	T ₁	T ₂	T ₄	T ₈	S ₂	S ₄	S ₈
...

```
#include <stdio.h>
#define N 50

int prime[N] ;

int main() {
    int j ;
    int k ;
    int n ;
    int quo,rem ;

P1: prime[0] = 2 ;
    n = 3 ;
    j = 0 ;
P2: j =j+1;
    prime[j] = n ;
P3: if (j == (N-1)) goto P9 ;
P4: n=n+2;
P5: k=1;
P6: quo = n / prime[k] ;
    rem = n % prime[k] ;
    if (rem == 0) goto P4 ;
P7: if (quo <= prime[k]) goto P2 ; P8: k=k+1;
    goto P6 ;
P9: for(j=0 ; j < N ; j++) printf("%d\n",prime[j]) ;
}
```

Homework Submission

- Please email me (ozturan@gmail.com) your homework as one zipped file. Do not send any executable files. In the subject of the e-mail, write :
CMPE 478 HW1 partner1name partner2name