Parallel Computing (BCS702)

Program - 2

Write a OpenMP program that divides the Iterations into chunks containing 2 iterations, respectively(OMP_SCHEDULE = static,2). Its input should be the number of iterations, and its output should be which iterations of a parallelized for loop are executed by which thread. For example, if there are two threads and four iterations, the output might be the following:
A.Thread 0 : Iterations 0--1
B.Thread 1: Iterations 2--3

```
#include <stdio.h>
#include <omp.h>


int main() {
   int n;

   printf("Enter number of iterations: ");
   scanf("%d", &n);

   #pragma omp parallel
   {
      int tid = omp_get_thread_num();

      #pragma omp for schedule(static,2)
      for (int i = 0; i < n; i++) {
         printf("Thread %d executes iteration %d\n", tid, i);
      }
   }

   return 0;
}
```

Output :

Enter number of iterations: 4

Thread 0 executes iteration 0
Thread 0 executes iteration 1
Thread 1 executes iteration 2
Thread 1 executes iteration 3