Exercise 2 - OpenMP Loop Schedule

The aim of this exercise is to create a visualization of two difference OpenMP schedules using differnt chuncks. The code runs in parallel and its aim is to visualize how work is distributed in the following case:

- static
- static with chunck size 1
- static with chunck size 10
- dynamic
- dynamic with chunck size 1
- dynamic with chunck size 10

With the schedule*(static, chunk-size)* OpenMP divides the iterations into chunks of size chunk-size and it distributes the chunks to threads in a circular order. When no chunk-size is specified OpenMP divides iterations into chunks that are approximately equal in size and it distributes at most one chunk to each thread.

With the schedule *(dynamic, chunk-size)* OpenMP divides the iterations into chunks of size chunk-size. Each thread executes a chunk of iterations and then requests another chunk until there are no more chunks available. There is no particular order in which the chunks are distributed to the threads. The order changes each time when we execute the for loop. If we do not specify chunk-size, it defaults to one.

The code was runned on Ulysses with 4 and 10 threads and the results are reported in the *res4.txt* and *res10.txt* files.