

Notes on OMP SCHEDULE GUIDED

Based on our observations from the hands-on exercise

GUIDED

Iterations are **dynamically** assigned to threads in blocks as threads request them until no blocks remain to be assigned.

Similar to DYNAMIC (which we did not experiment in the hands on) except that the block size decreases each time a parcel of work is given to a thread.

The size of the initial block is proportional to:

`number_of_iterations / number_of_threads`

Subsequent blocks are proportional to

`number_of_iterations_remaining / number_of_threads`

The chunk parameter defines the **minimum** block size. The default chunk size is 1.

As seen in the session yesterday. Some threads perform a large number of iterations while others do not. This is a feature of Dynamic scheduling where work is assigned to the free thread. If there are multiple free threads as in our case where we are NOT doing any other work, we could observe an extremely random pattern of iteration space to threads.