Tutorial 9 Conceptual Questions

1) OpenMp is an API for multi-platform shared memory parallel programming. OpenMP has a high level of abstraction, better performance.

2) The #pragma is the method specified by the C standard for providing additional information to the compiler.

3) #pragma omp parallel for private(i)

for (i = 0; i < n; i++) {

….

}

4) The reduction clause performs a reduction on the variables that appear in its list.

5) The critical directive enforces exclusive access with respect to critical directive in all threads, not just the current team. It will create a critical section and there are only one thread simultaneously. The private clause declares variables in its list to be private to each thread. So, other thread cannot access the private variable.

Reference:

https://computing.llnl.gov/tutorials/openMP/#REDUCTION

https://gcc.gnu.org/onlinedocs/cpp/Pragmas.html