* One of the most popular parallel programming languages
* Relatively easy to learn
* Parallel computing gives us the ability to get the same amount of work done with multiple cores at lower frequency and with tremendous power saving
* While earlier the task of optimizing performance was handled by the hardware side, with the evolution of chips, this was handed to software side and to come up with a way to optimize performance, the concept of parallel programming came up
* **Concurrency –** A condition of system in which multiple tasks are logically active at the same time.
* **Parallelism –** A condition of a system in which multiple tasks are actually active at one time.
* Parallel programs are a subset of concurrent programs in which they not even run but also execute at the same time.
* Parallel programming is one of the final steps, the initial stages require understanding the concurrency of the process and then figuring out the algorithm for integrating parallelism into it.
* OpenMP is a set of compiler directives and library routines for parallel application programmers. It eases writing multi-threaded programs in fortran, c and c++
* OpenMP basic structure:

