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Thread

↳ A thread is a flow of execution through the process Code with its own program Counter that keeps track of which instruction to execute next, System register which hold its current working variable and a stack which contains the execution history

↳ A thread shares with its peer threads few like Code Segment data Segment and open files. When one thread alters a Code Segment memory item all other threads see that.

↳ A thread is also called a lightweight process. threads provide a way to improve application performance through parallelism.

↳ Thread represent a software approach to improving performance of operating system by reducing the overhead thread is equivalent to a classical process

↳ Each thread belongs to exactly one process and no thread can exist outside a process.

↳ Each thread represents a separate flow of control.

↳ Threads have been successfully used in implementing network servers and web servers.

↳ They also provide a suitable foundation for parallel execution of application on shared memory multiprocessor

Process	Thread
1> Process is heavy weight or resource intensive	1> Thread is light weight taking lesser resources than a process
2> process switching needs interaction with operating system	2> Thread switching does not need to interact with operating system
3> In multiple processing environment, each process execute the same code ~~with~~ but has its own memory and file resource	3> All threads can share same set of open files child processes
4> If one process is blocked, then no other process can execute until the first process is unblocked	4> While one thread is blocked and waiting a second thread in the same task can run.
5> multiple processes without using thread use more resources	5> multiple threaded processes use fewer resources