Système d'exploitation

Lab 3 – Threads

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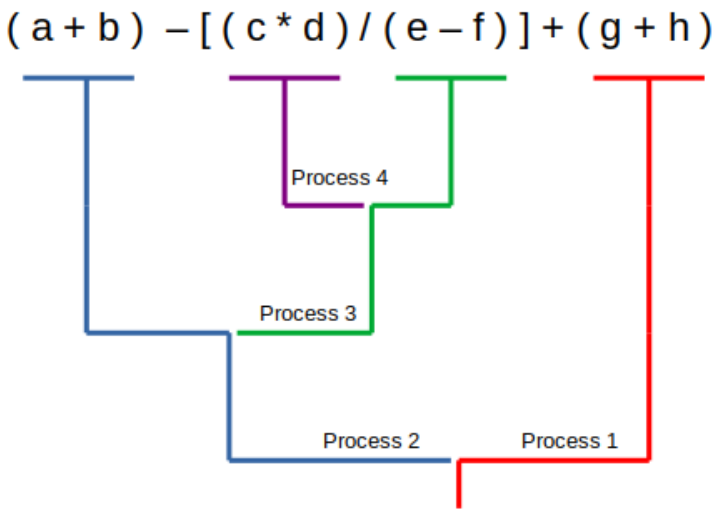
1. process architecture map :



Each process make two calculations (exept 4).
- First calculation is one of the fourth underlined
- then the the process wait for its children to finish
- in the end he makes a second calculation between his result and that of his son

The last calculation his made by process 1

I use the same architecture for Threads. The difference is that threads are not children of other threads.

2. The main difference is that threads share the same context and data. Therefore there is less context switch with thread than with process durring the scheduling.
While we need to use shared memory, thread are the better solution, because it run faster.

3. We run each version of the program 10000 times, count the number of context switch, and time of excecution for both.

Based on my result, threads are better. It run faster.

4. There is less context switch for threads because they share the same context.