Documentation of pintos alarm task

Data structures

- Only int_64 ticks, in the struct of thread.

Algorithms

- we check that ticks to wait for is greater than zero and then we get the currently Running thread to block it (by calling thread_block();) for some time (ticks) and set the Interrupt to it's old state.

- And every timer interrupt we decrement the remaining ticks for each blocked threads It the ticks reached zero , so we unblock the thread using (thread_unblock()).

Synchronization

- There is only one running thread at a time , when a timer_sleep() function is invoked The interrupt is switched to off and then on after blocking the thread.
- We will first block the thread that calls (timer_sleep()) and then we will iterate through All blocked threads to decrement the remaining ticks (including the newly blocked one).

Rational

- It's quite simple and it doesn't use a new memory (ready queue).