

Homework 2
Part 2
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Modified files:

- 1.) clkhandler.c: To reduce TC (time to completion) variable for each running process.
For ctr1000++.
- 2.) clock.h
- 3.) process.h : For adding variables to procent.
- 3.) initialize.c : nullproc is given TC=10000 (so high that it won't have minimum TC).
- 4.) create.c : All system processes are given TC=1. So that they should have TC less (and thus higher priority in terms of TC) than all user processes and if a user process is running and finds a system process on the ready list. The user process is preempted and system process starts running.
- 5.) resched.c : For finding the process with minimum time to completion.
- 6.) kill.c : Terminate processes and print termination time.

Created files:

create_user_proc.c: For creating user processes similar to system processes but with priority=1 (>0 for priority over null and less than 20 for lower priority than system). usr_proc==1.
Implemented timed_execution() function here.

Use Case:

Created 2 processes P1 and P2 with TC=100 each.
P1 starts running.
Main sleeps for 20ms.
P1 gets preempted main starts running.
Created another process P3 with TC=50.
P3 runs for 50ms.
P1 runs for 80ms.
P2 runs for 100ms.