In Linux, Process Priority is Dynamic

The scheduler keeps track of what processes are doing and adjusts their priorities periodically

- Processes that have been denied the use of a CPU for a long time interval are boosted by dynamically increasing their priority (usually I/O-bound)
- Processes running for a long time are penalized by decreasing their priority (usually CPU-bound)
- Priority adjustments are performed only on user tasks, not on real-time tasks

Tasks are determined to be I/O-bound or CPU-bound based on an interactivity heuristic

A task's interactiveness metric is calculated based on how much time the task executes compared to how much time it sleeps