Result: schedule a task to run

ENTRANCE: call taskRun(sturct TASK *task, int level, int priority);

Procedure `taskRun`(*struct TASK *task, int level, int priority*)

- **if** *level* < 0 **then**
  - don't change level, $level \leftarrow task->level$;
- **else**
  - *nothing to do here*;
- **end**
- **if** *priority* > 0 **then**
  - Change the priority, $task->priority \leftarrow priority$;
- **else**
  - *nothing to do here*;
- **end**
- **if** *the task is running and not at the level you want to set* **then**
  - Remove the task from the original level;
- **else**
  - *nothing to do here*;
- **end**
- **if** *task is not running, but sleeping* **then**
  - set the new level, $task->level \leftarrow level$;
  - waking up from sleep, call `taskAdd`(*task*);
- **else**
  - *nothing to do here*;
- **end**
- change the lv_change flag to 1, therefore, tasks must be switched when the task is scheduled next time;

Procedure `taskAdd`(*struct TASK *task*)

- look for the corresponding level of the task;
- place the task in the location indicated by running;
- runinng++; Mark the task as running;