Database and Information Systems 2020/2021, Test 1 (SQL SELECT), Variant: C

Duration: 70min

Maximal number of points/minimal number of points: **15/8**

Only complete and correct solution will be evaluated by non-zero points.

Tasks

1. Create procedure `UpdateEmployees` that will select all common employees (it means employees with `BossID != NULL`) and it will set them as external employees (it means attribute `is_extern` will set to 1) if they have handled less than 5 events in the last two years. The procedure will be handled as a transaction.

2. Create trigger `tgInsertEvent` which will be executed before insert into the table `Device_event`. The trigger will verify if the inserting event is of the event type with required recording (it means attribute `is_recorded` is set to 1). If not, the trigger will raise the error that the event cannot be recorded. If an event can be recorded, the trigger will verify if the start and end dates of the event were specified in the insert, and if not, the trigger will set these attributes as follows:

   - if `startDate` is not set, it will set it to the current timestamp
   - if `endDate` is not set, it will set it based on the importance of the event type (attribute `importance`) as follows:
     - $0 \rightarrow$ `startDate` + 1 day
     - $1 \rightarrow$ `startDate` + 3 days
     - $2 \rightarrow$ `startDate` + 1 week

   Help: In the trigger `BEFORE` it is possible to reset the values in the variable `:NEW`.