Milestone 7 Bewijs in PDF

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Overzicht vergelijking:

```
[2022-05-17 20:05:23] COMPARISON_SINGLE_BULK_M7(20, 40, 50)
[2022-05-17 20:05:24] generate_2_level(20, 40, 50);
[2022-05-17 20:05:24] GENERATE_THEATHERS(20) generated 20 rows
[2022-05-17 20:05:24] GENERATE_HALLS(40) generated 1000 rows
[2022-05-17 20:05:31] GENERATE_PERFORMANCES(50) generated 50250 rows
[2022-05-17 20:05:31]     The duration of generate_2_levels was: 7,129264
[2022-05-17 20:05:32] generate_2_level_bulk(20, 40, 50);
[2022-05-17 20:05:32] GENERATE_THEATHERS_BULK(20) generated 20 rows
[2022-05-17 20:05:32] GENERATE_HALLS_BULK(40) generated 1000 rows
[2022-05-17 20:05:34] GENERATE_PERFORMANCES_BULK(50) generated 50250 rows
[2022-05-17 20:05:34]     The duration of generate_2_levels was: 1,418696
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[2022-05-17 20:05:34] COMPARISON_SINGLE_BULK_M7(20, 40, 500)
[2022-05-17 20:05:35] generate_2_level(20, 40, 500);
[2022-05-17 20:05:35] GENERATE_THEATHERS(20) generated 20 rows
[2022-05-17 20:05:35] GENERATE_HALLS(40) generated 1000 rows
[2022-05-17 20:05:29] GENERATE_PERFORMANCES(500) generated 502500 rows
[2022-05-17 20:05:29]     The duration of generate_2_levels was: 54,164809
[2022-05-17 20:05:31] generate_2_level_bulk(20, 40, 500);
[2022-05-17 20:05:31] GENERATE_THEATHERS_BULK(20) generated 20 rows
[2022-05-17 20:05:31] GENERATE_HALLS_BULK(40) generated 1000 rows
[2022-05-17 20:05:45] GENERATE_PERFORMANCES_BULK(500) generated 502500 rows
[2022-05-17 20:05:45]     The duration of generate_2_levels was: 14,27831
```

Conclusie:

Bulk is veel sneller omdat je maar 1 maal een procedure doet op de databank.

Moeilijkheid:

Mijn domeinmodel vereist eerst een lijst met movies & locations vooraleer ik mijn 2 stappen diep kan maken.
Ik overschreef met de tijdelijke bulk tabel steeds mijn eerste rij omdat ik indexen aansprak via mijn 'i' en 'j' loop waardes.

Hoe opgelost:

Door eerst de manual input te runnen.
Door row counts uit te voeren en stap voor stap te achterhalen waar het probleem zat.

Overzicht functies:

```
------------------------
-- PRIVATE FUNCTIONS
------------------------
-- Random Data Functions
FUNCTION RANDOM_NUMBER_IN_RANGE...;
FUNCTION RANDOM_DATE_IN_RANGE...;
FUNCTION RANDOM_MOVIE_TITLE ...;
FUNCTION RANDOM_SCREENTYPE ...;


-- Lookup functions
FUNCTION LOOKUP_VIEWER...;
FUNCTION LOOKUP_MOVIE...;
FUNCTION LOOKUP_PERFORMANCE...;
FUNCTION LOOKUP_THEATHER...;
FUNCTION LOOKUP_HALL...;
FUNCTION LOOKUP_LOCATION...;
FUNCTION LOOKUP_COUNTRY...;
FUNCTION TIMESTAMP_DIFF...;
```

```
-- Functions to generate Random Rows (one by one)
PROCEDURE GENERATE_MOVIES...;
PROCEDURE GENERATE_VIEWERS...;
PROCEDURE GENERATE_THEATHERS...;
PROCEDURE GENERATE_HALLS...;
PROCEDURE GENERATE_PERFORMANCES...;
PROCEDURE GENERATE_TICKETS...;
PROCEDURE GENERATE_2_LEVELS...;
PROCEDURE GENERATE_MANY_TO_MANY...;


-- DDL Add single Rows into DB
PROCEDURE ADD_MOVIE...;
PROCEDURE ADD_VIEWER...;
PROCEDURE ADD_THEATHER...;
PROCEDURE ADD_HALL...;
PROCEDURE ADD_PERFORMANCE...;
PROCEDURE ADD_TICKET...;
PROCEDURE ADD_LOCATION...;
PROCEDURE ADD_ZIPCODE...;
PROCEDURE ADD_COUNTRY...;
```

```
-- DDL Generate BULK Random Rows into DB
PROCEDURE ADD_THEATHERS_BULK...;
PROCEDURE ADD_HALLS_BULK...;
PROCEDURE ADD_PERFORMANCES_BULK...;
PROCEDURE GENERATE_THEATHERS_BULK...;
PROCEDURE GENERATE_HALLS_BULK...;
PROCEDURE GENERATE_PERFORMANCES_BULK...;
PROCEDURE GENERATE_2_LEVELS_BULK...;


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-- PUBLIC FUNCTIONS
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-- M4
PROCEDURE MANUAL_INPUT_M4 ...;
PROCEDURE EMPTY_TABLES...;
-- M5
PROCEDURE BEWIJS_MILESTONE_5 ...;
-- M6
PROCEDURE PRINTREPORT_2_LEVELS_M6...;
-- M7
PROCEDURE COMPARISON_SINGLE_BULK_M7...;
```