

SQL TASK

Subject area: an online platform with multiple educational programs (professions). Programs consist of lessons. Students take lessons on the platform.

Given tables:

finished_lesson_test - a table with all the completed lesson sessions. Each row represents the completion of a specific lesson by a specific student for a specific profession.

Fields:

date_created - the time when the student completed the lesson

id - unique ID of the record in the table

lesson_id - ID of the lesson as a unit of content. Foreign key for linking with the

lesson_index_test table

user_id - ID of the student who completed the lesson

lesson_index_test - a table with all the lessons available on the platform.

Fields:

lesson_id - primary key of the table

lesson_name - the name of the lesson

profession_id - ID of the profession to which the lesson belongs

profession_name - the name of the profession

Each lesson can be taken by a student only once. A student can take lessons from different professions.

Task: After deploying the latest platform update, a bug started appearing in the logs: sometimes, according to the records, certain lessons are being completed suspiciously "quickly". We consider cases problematic when the time between the completion of two lessons by a student in a program is less than five seconds.

Provide SQL query with this output

delta_seconds	lesson_datetime	lesson_id	next_lesson_datetime	profession_name	user_id
0	2020-04-09T17:44:10Z	"21fbfb7c-8b74-40e7-9cd8-9590b7903f26"	2020-04-09T17:44:10Z	"data-analyst"	535641
2	2020-04-09T17:44:10Z	"24d355f6-4f88-4c05-bf51-e0e1db42f184"	2020-04-09T17:44:12Z	"data-analyst"	535645
4	2020-04-09T17:44:10Z	"3891bd65-5ff9-4355-b886-f5796ce6ba72"	2020-04-09T17:44:14Z	"data-analyst"	535648

Furthermore, initially, we want to focus on a specific cohort of a particular profession. The data extraction should include information only for students of the "data-analyst" profession from the April 2020 cohort. The April 2020 cohort of the "data-analyst" profession refers to students who completed their first lesson in this profession in April 2020.

DataBase: postgresQL