SQL Schema

Table: Failed

+--------------+---------+

| Column Name | Type |

+--------------+---------+

| fail\_date | date |

+--------------+---------+

Primary key for this table is fail\_date.

Failed table contains the days of failed tasks.

Table: Succeeded

+--------------+---------+

| Column Name | Type |

+--------------+---------+

| success\_date | date |

+--------------+---------+

Primary key for this table is success\_date.

Succeeded table contains the days of succeeded tasks.

A system is running one task **every day**. Every task is independent of the previous tasks. The tasks can fail or succeed.

Write an SQL query to generate a report of period\_state for each continuous interval of days in the period from **2019-01-01** to **2019-12-31**.

period\_state is *'failed'*if tasks in this interval failed or *'succeeded'* if tasks in this interval succeeded. Interval of days are retrieved as start\_date and end\_date.

Order result by start\_date.

The query result format is in the following example:

Failed table:

+-------------------+

| fail\_date |

+-------------------+

| 2018-12-28 |

| 2018-12-29 |

| 2019-01-04 |

| 2019-01-05 |

+-------------------+

Succeeded table:

+-------------------+

| success\_date |

+-------------------+

| 2018-12-30 |

| 2018-12-31 |

| 2019-01-01 |

| 2019-01-02 |

| 2019-01-03 |

| 2019-01-06 |

+-------------------+

Result table:

+--------------+--------------+--------------+

| period\_state | start\_date | end\_date |

+--------------+--------------+--------------+

| succeeded | 2019-01-01 | 2019-01-03 |

| failed | 2019-01-04 | 2019-01-05 |

| succeeded | 2019-01-06 | 2019-01-06 |

+--------------+--------------+--------------+

The report ignored the system state in 2018 as we care about the system in the period 2019-01-01 to 2019-12-31.

From 2019-01-01 to 2019-01-03 all tasks succeeded and the system state was "succeeded".

From 2019-01-04 to 2019-01-05 all tasks failed and system state was "failed".

From 2019-01-06 to 2019-01-06 all tasks succeeded and system state was "succeeded".