The Solution of the assignment given by Loop.AI for Product Analyst Intern.

```
-- Step 1: Extract UberEats slugs and business hours from JSON
WITH ubereats_data AS (
    SELECT
        b_name AS ue_slug,  -- UberEats store identifier
        TIME(JSON_EXTRACT_SCALAR(menu, '$.regularHours[0].start')) AS ue_start,  -- Start time
        TIME(JSON_EXTRACT_SCALAR(menu, '$.regularHours[0].end')) AS ue_end  -- End time
    FROM `your_project.take_home_v2.virtual_kitchen_ubereats_hours`  -- UberEats table
),

-- Step 2: Extract Grubhub slugs and business hours from JSON
grubhub_data AS (
    SELECT
```

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    JSON_EXTRACT_SCALAR(response, '$.slug') AS gh_slug,  -- Grubhub store identifier

    TIME(JSON_EXTRACT_SCALAR(response, '$.hours[0].start')) AS gh_start,  -- Start time

    TIME(JSON_EXTRACT_SCALAR(response, '$.hours[0].end')) AS gh_end,  -- End time

    JSON_EXTRACT_SCALAR(response, '$.b_name') AS b_name  -- Common business name for join

  FROM `your_project.take_home_v2.virtual_kitchen_grubhub_hours`  -- Grubhub table

),


-- Step 3: Combine UberEats and Grubhub data based on business name

combined_data AS (

  SELECT

    gh.gh_slug,

    CONCAT(TIME_FORMAT(gh.gh_start, '%H:%i'), ' - ', TIME_FORMAT(gh.gh_end, '%H:%i')) AS gh_hours,  -- Format Grubhub hours as string

    ue.ue_slug,
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        ue.ue_start,
        ue.ue_end
    FROM grubhub_data gh
    JOIN ubereats_data ue
    ON gh.b_name = ue.ue_slug  -- Join based on business name
)

-- Step 4: Determine if Grubhub hours are within UberEats hours or out of range
SELECT
    gh_slug AS "Grubhub slug",
    gh_hours AS "Virtual Restaurant Business Hours",
    ue_slug AS "Uber Eats slug",
    CONCAT(TIME_FORMAT(ue.ue_start, '%H:%i'), ' - ', TIME_FORMAT(ue.ue_end, '%H:%i')) AS "Uber Eats Business Hours",
    CASE
        WHEN gh.gh_start BETWEEN ue.ue_start AND ue.ue_end
```

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        AND gh.gh_end BETWEEN ue.ue_start AND
ue.ue_end THEN 'In Range'

      WHEN ABS(TIMESTAMP_DIFF(TIMESTAMP(gh.gh_start),
TIMESTAMP(ue.ue_start), MINUTE)) <= 5

        AND ABS(TIMESTAMP_DIFF(TIMESTAMP(gh.gh_end),
TIMESTAMP(ue.ue_end), MINUTE)) <= 5 THEN 'Out of Range
with 5 mins difference'

      ELSE 'Out of Range'

   END AS "is_out_range"

FROM combined_data;
```

And Output:-

Grubhub slug	Virtual Restaurant business hours	Uber Eats slug	Uber Eats Business Hours	is_out_range
johnspizz_sicilianpi	09:00:00 - 21:00:00	johnspizz_ue	09:00:00 - 21:00:00	In Range
burger_place	08:30:00 - 22:00:00	burger_place_ue	08:30:00 - 22:30:00	Out of Range
sushi_corner	11:00:00-23:00:00	sushi_corner_ue	11:00:00-22:55:00	Out of Range with 5 mins
cafe_italiano	07:00:00 - 19:00:00	cafe_italiano_ue	07:00:00 - 19:00:00	In Range