

```

SELECT
  descriptor,
  sum(complaint_count) as total_complaint_count,
  count(temperature) as data_count,
  ROUND(corr(temperature, avg_count),3) AS corr_count,
  ROUND(corr(temperature, avg_pct_count),3) AS corr_pct
From (
  SELECT
    avg(pct_count) as avg_pct_count,
    avg(day_count) as avg_count,
    sum(day_count) as complaint_count,
    descriptor,
    temperature
  FROM (
    SELECT
      DATE(timestamp) AS date,
      temperature
    FROM
      demos.nyc_weather) a
  JOIN (
    SELECT x.date, descriptor, day_count, day_count / all_calls_count as pct_count
    FROM
      (SELECT
        DATE(created_date) AS date,
        concat(complaint_type, ": ", descriptor) as descriptor,
        COUNT(*) AS day_count
      FROM
        `bigquery-public-data.new_york.311_service_requests`
      GROUP BY
        date,
        descriptor) x
    JOIN (
      SELECT
        DATE(timestamp) AS date,
        COUNT(*) AS all_calls_count
      FROM `<YOUR-PROJECT-NUMBER>.demos.nyc_weather`
      GROUP BY date
    ) y
    ON x.date=y.date
  ) b
  ON
    a.date = b.date
  GROUP BY
    descriptor,
    temperature
)
GROUP BY descriptor
HAVING

```

```
total_complaint_count > 5000 AND  
ABS(corr_pct) > 0.5 AND  
data_count > 5  
ORDER BY  
ABS(corr_pct) DESC
```

Simplified structure:

```
SELECT ...  
FROM (SELECT ...  
      FROM a  
      JOIN (SELECT ...  
            FROM x  
            JOIN y  
            ON ...) b  
      GROUP BY ...)  
GROUP BY ...  
HAVING ...  
ORDER BY ... DESC
```