Not sure how to do some of the things in the challenged but I think I know where the gaps in my knowledge are.

1. I would need to be able to join the tables on weather.date and trips.start\_date but do the join based on the first several characters because the weather table does not have hours or seconds on it. Once I do that I can ORDER BY duration DESC and LIMIT (3)
2. I thought I could do this one but what I attempted has a syntax error

SELECT station\_id

FROM status

WHEN docks\_available = 0

GROUP BY station\_id

This also does not work

SELECT station\_id, COUNT(docks\_available)

FROM status

GROUP BY station\_id

ORDER BY docks\_available ASC

LIMIT (1)