Outer Join

- Run command -

  - **set hive.auto.convert.join=false;**

- Find the count of those users for every country who have successfully submitted a solution.

  - Those users who have successfully submitted a solution -

    - **select country, count(distinct users.user_id) Count from users inner join submissions on users.user_id=submissions.user_id group by country order by Count;**

  - A left join would return all users, who have and haven't submitted a solution -

    - **select country, count(distinct users.user_id) Count from users left join submissions on users.user_id=submissions.user_id group by country order by Count;**

  - To only find users who haven't submitted a solution, we filter the data -

    - **select country, count(distinct users.user_id) Count from users left join submissions on users.user_id=submissions.user_id where problem_id is null group by country order by Count;**

- Full outer join in Hive -

  - **select * from users full outer join submissions on users.user_id=submissions.user_id;**

- **Exercise -** Find the count of those problems that were not solved by any user.