--Harpreet Singh

--041127993

--Display airline name and the country they are based in

SELECT

airlines.name AS Airline\_Name,

(SELECT name FROM countries WHERE countries.id = airlines.country\_id) AS Country\_Name

FROM

airlines;

--Count how many airlines are based in each country (sorted by most airlines)

SELECT

countries.name AS Country\_Name,

COUNT(airlines.id) AS Number\_of\_Airlines

FROM

airlines

JOIN

countries ON airlines.country\_id = countries.id

GROUP BY

countries.name

ORDER BY

Number\_of\_Airlines DESC;

--Count how many different aircraft operate routes ending at airports in France

SELECT

COUNT(DISTINCT aircrafts.id) AS Distinct\_Aircraft\_Count

FROM

routes

JOIN

route\_aircrafts ON routes.id = route\_aircrafts.route\_id

JOIN

aircrafts ON route\_aircrafts.aircraft\_id = aircrafts.id

WHERE

routes.destination\_airport\_id IN (

SELECT id

FROM airports

WHERE country\_id = (SELECT id FROM countries WHERE name = 'France')

);

--Count distinct airlines that operate routes ending in France, Germany, Spain, and Italy

SELECT

countries.name AS Country\_Name,

COUNT(DISTINCT airlines.id) AS Distinct\_Airlines\_Count

FROM

routes

JOIN

airports ON routes.destination\_airport\_id = airports.id

JOIN

countries ON airports.country\_id = countries.id

JOIN

airlines ON routes.airline\_id = airlines.id

WHERE

countries.name IN ('France', 'Germany', 'Spain', 'Italy')

GROUP BY

countries.name;

--Display the airline name, aircraft, and country for routes ending in France, Germany, Spain, and Italy

SELECT

airlines.name AS Airline\_Name,

aircrafts.description AS Aircraft\_Description,

countries.name AS Country\_Name

FROM

routes

JOIN

airports ON routes.destination\_airport\_id = airports.id

JOIN

countries ON airports.country\_id = countries.id

JOIN

airlines ON routes.airline\_id = airlines.id

JOIN

route\_aircrafts ON routes.id = route\_aircrafts.route\_id

JOIN

aircrafts ON route\_aircrafts.aircraft\_id = aircrafts.id

WHERE

countries.name IN ('France', 'Germany', 'Spain', 'Italy');

--Redo #8 using a subquery in the WHERE clause

SELECT

COUNT(DISTINCT aircrafts.id) AS Distinct\_Aircraft\_Count

FROM

route\_aircrafts

JOIN

aircrafts ON route\_aircrafts.aircraft\_id = aircrafts.id

WHERE

route\_aircrafts.route\_id IN (

SELECT id

FROM routes

WHERE destination\_airport\_id IN (

SELECT id

FROM airports

WHERE country\_id = (SELECT id FROM countries WHERE name = 'France')

)

);

--Redo #7 using a subquery in the FROM clause (Derived Table)

SELECT

Country\_Name,

COUNT(\*) AS Number\_of\_Airlines

FROM

(SELECT

airlines.id AS Airline\_ID,

countries.name AS Country\_Name

FROM

airlines

JOIN

countries ON airlines.country\_id = countries.id

) AS Subquery

GROUP BY

Country\_Name

ORDER BY

Number\_of\_Airlines DESC;