Assignment

A company has several locations worldwide and employs people from many different countries. The company organizes employee data in four tables, and the structure of the tables, their relationship with one another, and sample data from each are shown below.

COUNTRIES table:

Name	Data type	Primary Key	Foreign Key
CTRY_ID	INTEGER	🔑	
CTRY_NAME	VARCHAR (50)		

CTRY_ID	CTRY_NAME
1	INDIA
2	IRELAND
3	SOUTH KOREA

EMPLOYEES table:

Name	Data type	Primary Key	Foreign Key
EMP_ID	INTEGER	🔑	
EMP_FIRST_NAME	VARCHAR (50)		
EMP_LAST_NAME	VARCHAR (50)		
EMP_BIRTH_DATE	DATE		
EMP_COUNTRY_ORIGIN_ID	INTEGER		

EMP_ID	EMP_FIRST_NAME	EMP_LAST_NAME	EMP_BIRTH_DATE	EMP_COUNTRY_ORIGIN_ID
1	RONALD	FRIED	1998-12-18	2
2	TYLER	ALBIES	1990-12-12	NULL
3	DANSBY	RILEY	2002-04-13	2
4	FREDDIE	SWANSON	1993-09-30	NULL
5	LUKE	FREEMAN	1995-06-04	3

WORKING_CENTERS table:

Name	Data type	Primary Key	Foreign Key
WC_ID	INTEGER	🔑	
WC_NAME	VARCHAR (50)		
WC_ADDRESS	VARCHAR (50)		
WC_COUNTRY_ID	INTEGER		

WC_ID	WC_NAME	WC_ADDRESS	WC_COUNTRY_ID
1	EUROPE BRANCH	13, WELSH DRIVE, DUBLIN	2
2	ASIA PACIFIC BRANCH	13298, KING CIRCLE, BUSAN	3

EMPLOYEES_WORKING_CENTERS table:

Name	Data type	Primary Key	Foreign Key
EWC_EMPLOYEE_ID	INTEGER		
EWC_WORKING_CENTER_ID	INTEGER		
EWC_START_DATE	DATE		

EWC_EMPLOYEE_ID	EWC_WORKING_CENTER_ID	EWC_START_DATE
1	1	2019-05-15
2	2	2017-05-15
3	1	2020-02-15
4	2	2019-11-15
5	1	2018-05-15

COUNTRIES

CTRY_ID
CTRY_NAME

WORKING_CENTERS

WC_ID
WC_NAME
WC_ADDRESS
WC_COUNTRY_ID

EWC_START_DATE

EMPLOYEES

EMP_ID
EMP_FIRST_NAME
EMP_LAST_NAME
EMP_BIRTH_DATE
EMP_COUNTRY_ORIGIN_ID
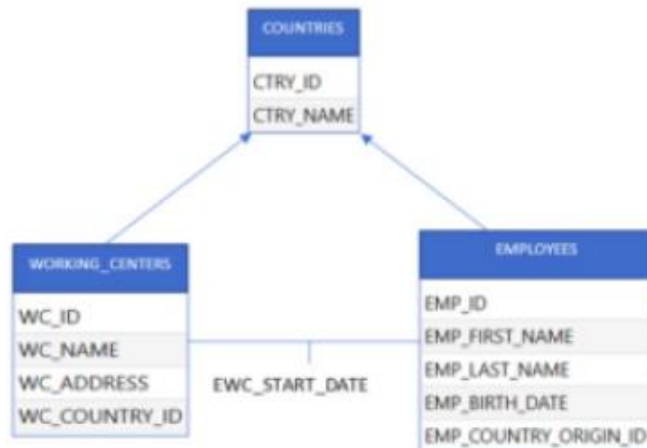
Note that the data provided is only sample data. Keep in mind that the full database has more rows of data in it and your queries must return the correct results for all data.

You are required to carry out the following task:

Create an SQL query that returns a list of countries and the number of "culture carriers" for each country. An employee is considered to be a "culture carrier" for their country of origin if the employee has been working at the company for at least 1 year.

Take the following points into consideration when creating your query:

- List only countries that have more than one culture carrier.
- If the EMP_COUNTRY_ORIGIN_ID field is NULL, use the country in which the employee is working as the employee's country of origin.
- Order the list by the number of "culture carriers" in descending order.
- If two or more countries have the same number of culture carriers, order them alphabetically by country name (A-Z)

Sample result:

COUNTRY	COUNT(*)
SOUTH KOREA	3
IRELAND	2

The following are the snapshots of the task assigned

- ▼ 🗄 **sql_assignment**
  - ▼ 🗐 Tables
    - ▶ ▦ countries
    - ▶ ▦ employees
    - ▶ ▦ employees_workir
    - ▶ ▦ working_centers
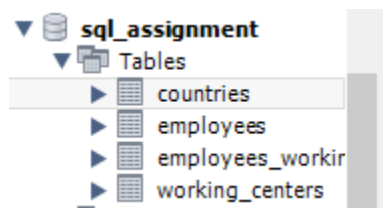
```
1 •  SELECT * FROM sql_assignment.countries;
```

Result Grid | Filter Rows: | Edit:

CTRY_ID	CTRY_NAME
1	INDIA
2	IRELAND
3	SOUTH KOREA
NULL	NULL

```
1 •  SELECT * FROM sql_assignment.countries;
2 •  SELECT * FROM sql_assignment.employees;
```

Limit to 50000 rows

Result Grid | Filter Rows: | Edit: | Export/Import:

EMP_ID	EMP_FIRST_NAME	EMP_LAST_NAME	EMP_BIRTH_DATE	EMP_COUNTRY_ORIGIN_ID
1	RONALDO	FRIED	1998-12-18	2
2	TYLER	ALBIES	1990-12-12	NULL
3	DANSBY	RILEY	2002-04-13	2
4	FREDDIE	SWANSON	1993-09-30	NULL
5	LUKE	FREEMAN	1995-06-04	3

```
1 •   SELECT * FROM sql_assignment.countries;
2 •   SELECT * FROM sql_assignment.employees;
3 •   SELECT * FROM sql_assignment.employees_working_centers;
4
```

Result Grid	Filter Rows:		Export:	Wrap Cell Content:
EWC_EMPLOYEE_ID	EWC_WORKING_CENTER_ID	EWC_START_DATE	TODY_DATE	
1	1	2019-05-15	2022-08-08	
2	2	2017-05-15	2022-08-08	
3	1	2020-02-15	2022-08-08	
4	2	2019-11-15	2022-08-08	
5	1	2018-05-15	2022-08-08	

I created a new column, tody_date, so as to determine the difference between the existing date and the current date.



```
1 •   SELECT * FROM sql_assignment.countries;
2 •   SELECT * FROM sql_assignment.employees;
3 •   SELECT * FROM sql_assignment.employees_working_centers;
4 •   SELECT * FROM sql_assignment.working_centers;
5
```

Result Grid	Filter Rows:		Edit:	Export/Imp
WC_ID	WC_NAME	WC_ADDRESS	WC_COUNTRY_ID	
1	EUROPE BRANCH	13 WELSH DRIVE, DUBLIN	2	
2	ASIA PACIFIC BRANCH	13298 KING CIRCLE, BUSAN	3	

The final query is displayed as under:-
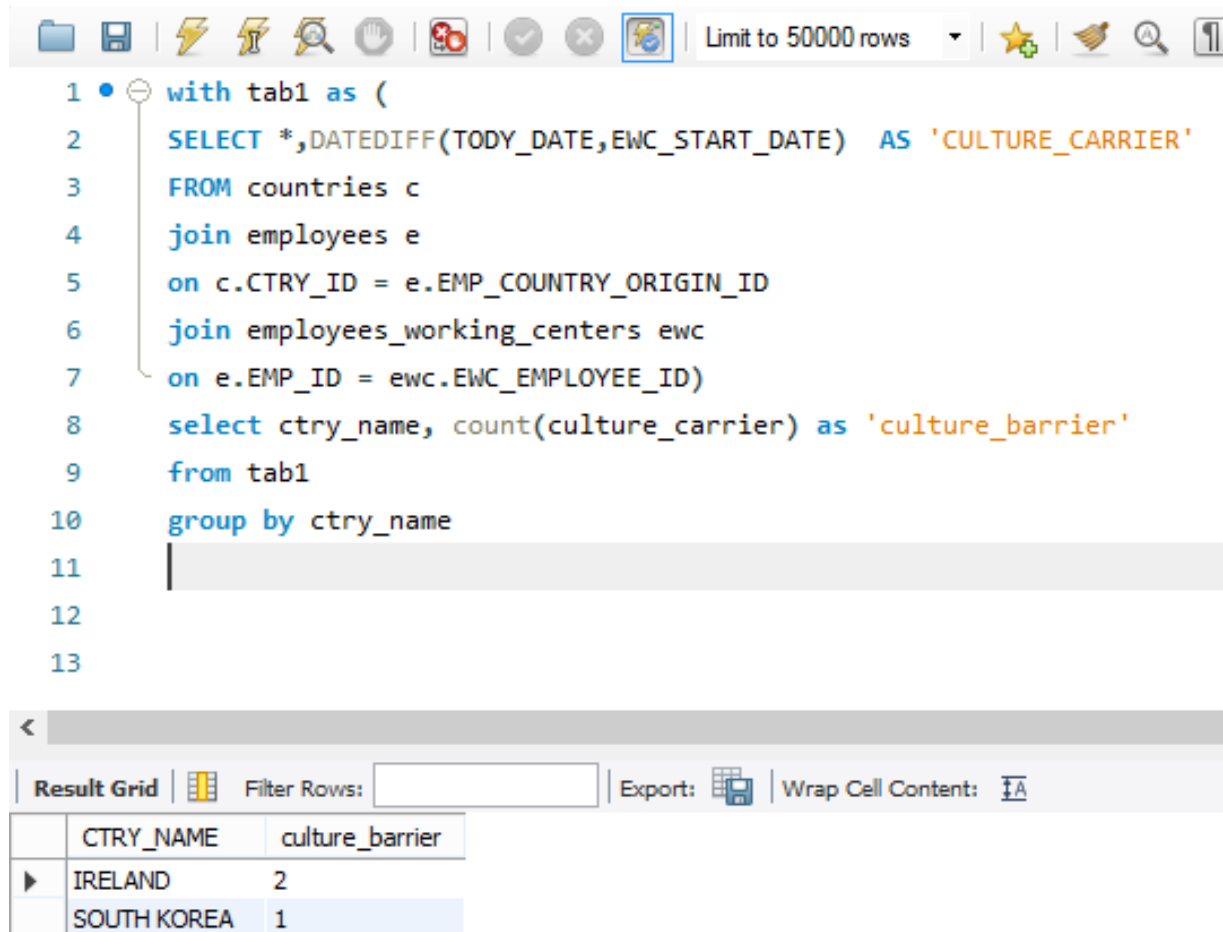
```
1    -- with tab1 as (
2  • SELECT *,DATEDIFF(TODY_DATE,EWC_START_DATE)  AS 'CULTURE_CARRIER'
3    FROM countries c
4    join employees e
5    on c.CTRY_ID = e.EMP_COUNTRY_ORIGIN_ID
6    join employees_working_centers ewc
7    on e.EMP_ID = ewc.EWC_EMPLOYEE_ID;
8  • select ctry_name, count(culture_carrier) as 'culture_barrier'
9    from tab1
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: $\overline{I}A$

CTRY_ID	CTRY_NAME	EMP_ID	EMP_FIRST_NAME	EMP_LAST_NAME	EMP_BIRTH_DATE	EMP_COUNTRY_ORIGIN_ID	EWC_EMPLOYEE_ID	EWC_WORKING_CENTER_ID	EWC_START_DATE	TODY_DATE	CULTURE_CARRIER
2	IRELAND	1	RONALDO	FRIED	1998-12-18	2	1	1	2019-05-15	2022-08-08	1181
2	IRELAND	3	DANSBY	RILEY	2002-04-13	2	3	1	2020-02-15	2022-08-08	905
3	SOUTH KOREA	5	LUKE	FREEMAN	1995-06-04	3	5	1	2018-05-15	2022-08-08	1546

Result 29 ✕

```
1 ●  ⊖  with tab1 as (
2          SELECT *,DATEDIFF(TODY_DATE,EWC_START_DATE)  AS 'CULTURE_CARRIER'
3          FROM countries c
4          join employees e
5          on c.CTRY_ID = e.EMP_COUNTRY_ORIGIN_ID
6          join employees_working_centers ewc
7          on e.EMP_ID = ewc.EWC_EMPLOYEE_ID)
8          select ctry_name, count(culture_carrier) as 'culture_barrier'
9          from tab1
10         group by ctry_name
11
12
13
```

CTRY_NAME	culture_barrier
IRELAND	2
SOUTH KOREA	1

This is the final query and the results of which have been shown above.