



Homework #4 Help

Travel and Tourism Industry Problem

Background Information

Travel and tourism comprise one of the largest industries in the world. Across the globe, it supports 101 million jobs and contributes \$2.1 trillion to the world economy. The travel and tourism industry brings in customers and helps associated businesses like accommodation services, food & beverages, recreational services, retail trade, and transportation to flourish.



Gathering data on revenue generated by tourism across different regions provides important insight into the economies of those regions. This data helps in understanding the growth of businesses dependant on tourism and their contribution to economy.

Problem Statement

In this assignment, students will create a database to store and analyze employment and income of the 5 countries with the largest travel and tourism industries.

Instructions

IMPORTANT: This is not the actual Homework for your section. You will not receive any credit for completing this project.

IMPORTANT: This assignment requires the Windows version of Microsoft 365. macOS users can access a ready-to-use version through Windows Virtual Desktop by following the instructions at <https://cs101.wvu.edu/wvd>.

IMPORTANT: Complete the steps below in the order they are given. Completing the steps out of order may complicate the assignment or result in an incorrect result.

1. Create a new Microsoft Access database named **hwhelp4_tatip_lastname_firstname.accdb**.
2. We would like to begin by making a table to store region names.
 - a. Create a table named *Regions* to store the names of regions and their abbreviations. Design the abbreviation as primary key.



Homework #4 Help

Travel and Tourism Industry Problem

- b. Enter records for all regions below.

HINT: The *Regions* table will contain 8 records.

Region Abbreviation	Region Name
AF	Africa
AS	Asia
EU	Europe
NA	North America
OC	Oceania
SA	South America
ME	Middle East
CA	Caribbean

3. We need to create a table to store information about economic groups.
- Create a table named *EconomicGroups* to store the names of economic groups and their abbreviations. Designate the group abbreviation as primary key.
 - Enter records for the economic groups below [1], [2].

HINT: The *EconomicGroups* table will contain 3 records.

Group Abbreviation	Group Name
G20	Group of Twenty
G8	Group of Eight
G8+5	Group of Eight plus Emerging Markets

4. To finish adding our dataset, we must store information about tourism revenue and employment.
- Create a table named *TourismStatistics* to store information on each country (listed below under Step 4b). Some requirements for this table appear below.

IMPORTANT: Completely define the *TourismStatistics* table before entering records.

- For the primary key, use an AutoNumber-type field to store an ID number.
- Provide a field to store the country.
- Provide a field to store the region. Using a lookup field referencing the *Region* table, allow the user to select the region abbreviation and name (e.g., "NA | North America") from a dropdown list.



Homework #4 Help

Travel and Tourism Industry Problem

Do not hide the key column. Store the value of the region abbreviation field. Enable data integrity, restricting deletes, on the relationship created by the Lookup Wizard.

- iv. Provide a field to store the economic group. Using a lookup field referencing the *EconomicGroups* table, allow the user to select the group abbreviation and name (e.g., "G8 | Group of Eight") from a dropdown list.

Do not hide the key column. Store the value of the group abbreviation field. Enable data integrity, restricting deletes, on the relationship created by the Lookup Wizard.

- v. Provide a standard-type number field with no decimal places to store the number of people employed in the tourism industry.
- vi. Provide a field formatted as percentage with one decimal place to store the percentage of total employees working in the tourism industry. Use the *Double* field size.
- vii. Provide a currency field store the revenue from foreign tourists.
- viii. Provide a currency field to store the revenue from domestic tourists.
- ix. Provide a field to store the economic classification. Using a lookup field, allow the user to select the year from a dropdown list. Permit the user to choose only from these values:
 - ◇ Emerging
 - ◇ Advanced



Homework #4 Help

Travel and Tourism Industry Problem

- b. Enter the below data into your *TourismStatistics* table as appropriate. The below information is from 2016 [3]–[5].

HINT: The *TourismStatistics* table will contain 19 records.

Country	Region	Eco n Grp	Tourism Employme nt	Pctg Wkfc in Tourism	Foreign Tourist Revenue	Domestic Tourist Revenue	Econ Class
Argentina	S. Am.	G20	572,731	3.2%	\$4,430,070,000	\$29,728,700,000	Emer
Australia	Oceania	G20	545,033	4.6%	\$20,278,400,000	\$71,889,900,000	Adv
Brazil	S. Am.	G8+5	2,530,260	2.8%	\$6,665,480,000	\$95,835,700,000	Emer
Canada	N. Am.	G8	543,388	3.0%	\$15,028,000,000	\$55,741,800,000	Adv
China	Asia	G8+5	23,680,600	3.1%	\$119,696,000,000	\$544,307,000,000	Emer
France	Europe	G8	1,180,260	4.2%	\$46,776,500,000	\$123,662,000,000	Adv
Germany	Europe	G8	3,085,040	7.1%	\$46,677,500,000	\$319,736,000,000	Adv
India	Asia	G8+5	25,394,700	5.8%	\$22,785,600,000	\$167,449,000,000	Emer
Indonesia	Oceania	G20	1,944,180	1.6%	\$13,039,900,000	\$17,644,800,000	Emer
Italy	Europe	G8	1,246,080	5.5%	\$41,553,300,000	\$114,582,000,000	Adv
Japan	Asia	G8	1,124,820	1.7%	\$32,381,300,000	\$199,525,000,000	Adv
Mexico	N. Am.	G8+5	4,059,290	7.9%	\$20,422,900,000	\$106,580,000,000	Emer
Russia	Europe	G8	869,361	1.2%	\$11,373,300,000	\$34,379,000,000	Emer
Saudi Arabia	Mid East	G20	603,732	5.1%	\$11,477,600,000	\$15,594,300,000	Emer
South Africa	Africa	G8+5	716,258	4.6%	\$8,718,830,000	\$10,175,000,000	Emer
South Korea	Asia	G20	601,211	2.3%	\$21,148,400,000	\$46,775,700,000	Adv
Turkey	Mid East	G20	495,106	1.8%	\$26,516,500,000	\$26,517,900,000	Emer
United Kingdom	Europe	G8	1,789,333	5.4%	\$25,995,574,965	\$93,995,177,990	Adv
United States	N. Am.	G8	5,485,830	3.6%	\$212,291,000,000	\$815,825,000,000	Adv

5. Create separate queries to provide the information requested below. Name each query after the step in which it appears (e.g., name the query in Step 5a as *Query5A*).

HINT: Run your queries to test them. Make sure that they display all and only the records that you would expect to appear.



Homework #4 Help

Travel and Tourism Industry Problem

- a. Create a query to display tourism statistics for each country. List the region name, country, economic group name, tourism employment, foreign tourist revenue, and domestic tourist revenue.

Sort by region name and then by country, both in ascending order.

HINT: This query will show 19 records and 6 fields.

- b. We wish to compare the revenue from foreign tourists to the revenue from domestic tourists. Create a query listing the country, economic group name, foreign tourist revenue, and domestic tourist revenue. Also, include a field to calculate the ratio of foreign tourist revenue to domestic tourist revenue.

You can calculate the ratio of foreign tourist revenue to domestic tourist revenue using the formula:

$$\frac{[ForeignTouristRevenue]}{[DomesticTouristRevenue]}$$

Format the calculated field as a standard-type number with 2 decimal places. Sort by the calculated field in descending order.

HINT: This query will show 19 records and 5 fields.

- c. Create a query to display information on tourism employment in Asian countries. List the country, economic classification, tourism employment, and percentage of employees working in tourism.

Only display countries located in the Asia region. Do not show the region in the results.

HINT: This query will show 4 records and 4 fields.

- d. We wish to summarize employment and revenue for each economic group. Create a query listing, for each economic group, the sum of tourism employment, sum of foreign tourist revenue, and sum of domestic tourist revenue.

Format the sum of tourism employment as a standard-type number with no decimal places. Format the sum of foreign tourist revenue and sum of domestic tourist revenue as currency with no decimal places.

HINT: This query will show 3 records and 4 fields.



Homework #4 Help

Travel and Tourism Industry Problem

- e. Create a query to display the number of countries in region. List, for each region name, the count of its countries.

Your results must include all regions, even if they have no countries.

Format the count of countries as a standard-type number with no decimal places.

HINT: This query will show 8 records and 2 fields.

6. Using the Form Wizard, create a form with subform. The main form should display the full region name. The subform must display a datasheet with all *TourismStatistics* table fields.

Name the main form *RegionData* and the subform *RegionDataSubform*.

7. Using the Report Wizard, create a report to show the results of the *Query5A* query. Display all fields from the query.

View by region name and sort by country in ascending order. Use a stepped layout and landscape page orientation. Name the report *RegionSummary*.

Ensure the full widths of all columns are visible on the report.

8. We need to create a new table to store analysis questions responses.
- a. Create a table named *AnalysisQuestions* with the fields below. Use appropriate field types and designate a good primary key.

Table: <i>AnalysisQuestions</i>	
Field Name	Description
QuestionNumber	Question being answered.
Response	Response to the analysis question prompt.

9. In the *AnalysisQuestions* table, answer four of the five analysis questions below. Respond to one question per record.
- a. Among counties in the Group of Eight, France has the highest ratio of foreign tourist revenue to domestic tourist revenue. The United States has the highest amount of foreign tourist revenue, however. Why do you think that revenue from foreign visitors to the U.S. exceeds France?
- b. Revenue from foreign tourists is a major contributor to many countries' economies. What are some major factors impacting the number of foreign travelers visiting a country? Name at least two factors.
- c. Does there appear to be any relationship between if a country was an emerging or advanced economy and the percentage of its workforce involved in tourism? Does tourism have an impact on an economy's status?



Homework #4 Help

Travel and Tourism Industry Problem

- d. Between 2008 and 2012, foreign tourist revenue for the United States increased while domestic tourist revenue decreased. What are some possible reasons for this phenomenon?
- e. In countries like Singapore, Maldives, and Bermuda, the ratio of foreign tourist revenue to domestic tourist revenue exceeds one. What does this imply? Speculate on the economies of these countries.
10. Run the Compact and Repair Database utility on your database. Ignore any errors you receive when running the utility.

Grading Rubric

This is a practice assignment and is worth no points. A comparable Homework would be worth 50 points and graded using this rubric, with partial credit awarded as appropriate:

Steps 2a-b	3 points total	Step 6	3 points
Steps 3a-b	3 points total	Step 7	3 points
Step 4a	5 points	Step 8a	2 points
Step 4b	3.5 points	Steps 9a-e (pick 4 of 5)	2.5 points each
Steps 5a-e	3.5 points each		

The analysis questions in Steps 9a-e can be evaluated using this rubric:

Standard	Meets Requirements (1.25 points)	Does Not Meet Requirements (0 points)
Answer is reasonable.	Answer addresses the question prompt and is factually correct or a reasonable interpretation of available data.	Answer does not address the question prompt, is factually incorrect, or is an unreasonable interpretation of available data.
Answer is supported.	Logical rationale is provided to support the given answer.	Logical rationale is not provided to support the given answer.

References

- [1] "Group of Eight," *Wikipedia*, Mar. 13, 2017. Available: https://en.wikipedia.org/w/index.php?title=Group_of_Eight&oldid=770099325.
- [2] "G20," *Wikipedia*, Mar. 20, 2017. Available: <https://en.wikipedia.org/w/index.php?title=G20&oldid=771264400>.
- [3] "Data Gateway," *World Travel & Tourism Council*. Available: <http://www.wttc.org/datagateway/>.
- [4] "Labor force, total | Data," *World Bank*. Available: <http://data.worldbank.org/indicator/SL.TLF.TOTL.IN>. Accessed: Mar. 21, 2017.



Homework #4 Help

Travel and Tourism Industry Problem

[5] "UK Tourism Statistics 2016," Tourism Alliance, 2016. Available:
http://www.tourismalliance.com/downloads/TA_390_415.pdf.