OPMT7750

ASSIGNMENT 2

The following assignment assumes you have worked through Chapters 1 & 2 in the textbook.

Open a blank Excel workbook and use the **Get & Transform** function to import **Assignment 2 Data** workbook data.

The data provided is for a fictitious pet adoption company. Pets are adopted via its online platform or within its store locations, and the company donates 50% of all profits to local animal shelters. Pets adopted must be spayed or neutered, and an additional fee is assessed if required.

SALES TABLE

Field	Description
City	Location of pet
Region	The geographic location of the city
PetType	Type of pet
TransactionType	Pets are either viewed instore or online
Fixed	Has the pet been neutered or spayed?
AdoptionDate	Date of adoption
OrderID	Unique identifier of the adoption transaction
Price	Adoption price
StatusID	Status of adoption (see Status table)
Cost	Adoption cost

STATUS TABLE

Field	Description
StatusID	Unique identifier
Status	Status type

POWER QUERY STEPS

STEP ONE – Create a new Excel workbook

- Save your workbook as **A### Assignment 2**, where ### is your student ID.

STEP TWO – Create the Status Query

- Get data from the **Status** table in the Assignment 2 Data workbook
- Load the data as a **Connection Only**
- Do NOT add the data to the data model
- Ensure your query is named **Status**

STEP THREE – Create the Sales Query

- Get data from the **Sales** table in the Assignment 2 Data workbook
- Change the **AdoptionDate** field type to Date (not DateTime)
- Referencing the AdoptionDate field, add a new column with the Name of Month > rename the new column to **AdoptionMonth**
- Format the **Cost** and **Price** fields as Currency
- Referencing the Price and Cost columns, add a new column that calculates **Profit** (Price-Cost) > ensure the field type is set to Currency
- Add a new calculated column called **Donation** that calculates 50% of the Profit value > ensure the field type is set to Currency
- Add a new conditional column called **VetFee** that calculates $100 if the pet is fixed (i.e., spayed or neutered) and $300 if the pet is not fixed > ensure the field type is set to Currency
- Add a new column called **TotalPrice** that calculates Price+VetFee
- **Filter** your sales query to **EXCLUDE** adoptions that took place in **December**
- Add a new **PriceRange** column based on the TotalPrice column with the following logic*
    - If Total >=575, then High
    - If UnitPrice is between 425-574, then Medium
    - If UnitPrice is less than 425, then Low

  **You can create a Conditional Column or use the Column From Examples function and edit the formula to achieve the result*
- Load the query as a **Connection Only**
- Add the data to the data model
- Ensure your query is named Sales

STEP FOUR – Merge your Queries

Once you have successfully loaded your queries:

- Open the **Sales** query
- Add a step to **merge** it to the **Status** query
- Expand the **Status** column
- Remove the **StatusID** column
- Rename the new column to **AdoptionStatus**.

ASSIGNMENT QUESTIONS

Point values are in [brackets].

1. How many rows are in the Sales query? [1]
2. How many columns are in the Sales query? [1]
3. On Sheet1 of your workbook, create a pivot table that shows the total donations by Month. Your pivot table should have the following characteristics [3]
    - Show Donation as value, AdoptionMonth as row
    - Format your Donation number value as Accounting
    - Format your Donation number to zero decimal places
    - Rename your value field to DonationAmt
    - Remove field headers
    - Rename your pivot table to Donations
4. Referencing this pivot table, how many months have donations less than $400? [1]
5. Continuing in Sheet1 of your workbook, create a pivot table that shows the total number of Finalized adoptions of Cats and Dogs by Region. Your pivot table should have the following characteristics [2]
    - Use OrderID as value, Region as row, PetType as column
    - Filter on AdoptionStatus
    - Apply Green Data Bar conditional formatting for all cells showing values for Region and PetType
    - Remove Grand Totals
6. Referencing this pivot table, how many cat adoptions were finalized in the Okanagan? [1]
7. Continuing in Sheet1 of your workbook, create a pivot table that shows the percent breakdown of pet adoptions by price range. Your pivot table should have the following characteristics [3]
    - Use OrderID as value, PriceRange as row
    - Show value as a percent of Grand Total
    - Apply column banding
    - Rename your value field to “AdoptionBreakdown”
    - Remove field headers
    - Sort values from largest to smallest
8. Using this pivot table, what percentage of adoptions were in the Low price range? [1]
9. Continuing in Sheet1 of your workbook, insert a 2D Pie Chart based on the pivot table you created in step 7 [2]
    - Rename the chart “Price Breakdown”
    - Add outside-end data labels
    - Hide all field buttons on the chart
    - Use the Move Chart function to move your chart to a new worksheet called Chart1

INSTRUCTIONS:

For your assignment to be graded, you must do both of these steps:

1. Upload your Assignment 2 Excel file to the Learning Hub Assignment 2 folder
2. Complete the Assignment 2 Quiz in the Learning Hub