Case Study 1: IMDB Dataset

1. Create a view to show # of Titles by Country, excluding the USA, for the entire sample. Name the PivotTable "Titles by Country", then use a PivotChart to visualize this view as a Clustered Column Chart.
2. Hide the Field Buttons from the PivotChart, then apply a value filter to only show the top 10 countries by # of Titles. Which country is #2?
3. Change the chart type to a Clustered Bar, and change the PivotTable sorting to ascending by # of Titles.
4. Pull in IMDb Score as a second series, and summarize values by Average. Change your PivotChart type to Combo, with # of Titles as a Clustered Column and IMDb Score as a Line with Markers, on the Secondary Axis. Which of the 10 countries generated the lowest average IMDb scores? (Bonus: Format the IMDb series in the chart to only show the markers, with no line)
5. Copy the existing pivot and create a second view below the combo chart to show Budget by Genre, with a Top 5 filter applied. Name the table "Budget by Genre", then visualize this view with a Pie chart, with hidden field buttons.
6. Insert a Slicer for Genre, enable multi-select, then connect it to both PivotTables.

Case Study 2: Shark Attack Dataset

1. Show the count of attacks by country -- which 3 countries had the highest number of reported attacks over the past 5 years (2012-2016)? During this period, what % of reported attacks occurred in Spain? Then use a PivotChart to visualize this view as a Clustered Bar Chart.
2. Drag the "Area" field to the PivotTable row labels, change the Report Layout to Outline, and filter to show the top 5 areas by count of Case Number, by country. Where in South Africa were shark attacks most frequently reported over the past 5 years?
3. Replace "Area" with "Type" and show the Count of Case Number values as % of Parent Total for each country. What % of attacks in New Zealand were unprovoked? How many cases?
4. Filter the Pivot for the USA only, and create a PivotChart to show the count of shark attacks by "Area". Use a column chart, and hide all field buttons. Try changing the chart type to a Donut or Bar Chart instead.
5. What was Darren Good doing when he was attacked? When did this happen?

Case Study 3: Daily Weather Conditions

1. How many days in 2016 were categorized as Clear vs. Rain vs. Snow? (use the Conditions field)
2. What was the average temperature on clear days vs. snowy days? What about the average max temperature?
3. Update your view to show the # of Days by Month (primary row labels) and Conditions (secondary row labels), and show the # of Days as the % of the month as a whole. What percent of September days are clear?
4. Remove the second instance of # of Days, move Conditions to the column labels, and update the Show Values As calculation to % of Row Total. How often did it snow in January 2016, as a percentage of the month?
5. Remove grand totals and visualize the data as a 100% Stacked Column chart. In how many months of 2016 did it not snow at all?

Case Study 4: Burrito Ratings Dataset

1. In your new PivotTable, compare average ratings for Tortilla, Temp, Fillings, Synergy, and Wrap Quality, by Location
2. Drag in the sum of the "# of Reviews" field and apply a value filter to only show locations with more than 2 ratings. How many locations recorded >2 ratings?
3. Create a calculated field named "Average Total Score", which correctly averages the five scores by location
4. Add a second instance of Average Total Score and show the values as a Rank (large to small) based on location. Among those with >2 reviews, which location is ranked #7?
5. Add a Color Scale to the Average Total Score field and sort descending. Which location has the lowest score? The highest?
6. Drag in Yelp Rating as an average, add a Color Scale, and compare against the Average Total Score field. How closely do the two fields align?

Case Study 5: Salaries Data

1. Filter and sort the Pivot to show the 5 employees who earned the highest Base Pay in 2011. Who were they?
2. Add a calculated field named "% Other Pay" (Other Pay/Total Pay), formatted as a percentage with 1 decimal. How many job titles earned only Other pay in 2012?
3. Insert a Slicer for job titles, enable multi-select, then connect it to PivotTables.
4. Among employees with >=$100k Base Pay in 2012, Did any employee earn more than 50% of their salary from Other Pay? If so, who?
5. Clear all filters and pull in Job Category and Job Title as row labels (Titles sorted alphabetically), then group any titles including the word "Curator" into a new category called "Curator". How many employees held some sort of Curator position in either 2012 or 2013? Among those, who earned the highest average base pay?
6. Copy the existing pivot and create a second view to create a column chart on the above result.

Case Study 6: Baseball Team Stats

1. Create a view showing RS and RA by Team, then create calculated fields named "Net Runs" (RS - RA) and "HR per Game" (HR/G). Which team had the highest Net Run total over the entire sample? What about just the 2015 season?
2. Update the Pivot to show data for the Red Sox by year. Which years did they win the Division (DivWin)? The Wild Card (WCWin)? The World Series (WSWin)?
3. Show home runs (HR) by year, for the entire sample (all teams), and drag in a second instance as the % Difference From the previous year. In which season did overall home run totals decrease the most Y-o-Y?
4. Insert a PivotChart to show Net Runs by year (as columns), with a slicer for Team. Add HR per Game as a line on the secondary axis, and compare the correlations for different teams. How well does HR per Game align with Net Runs?