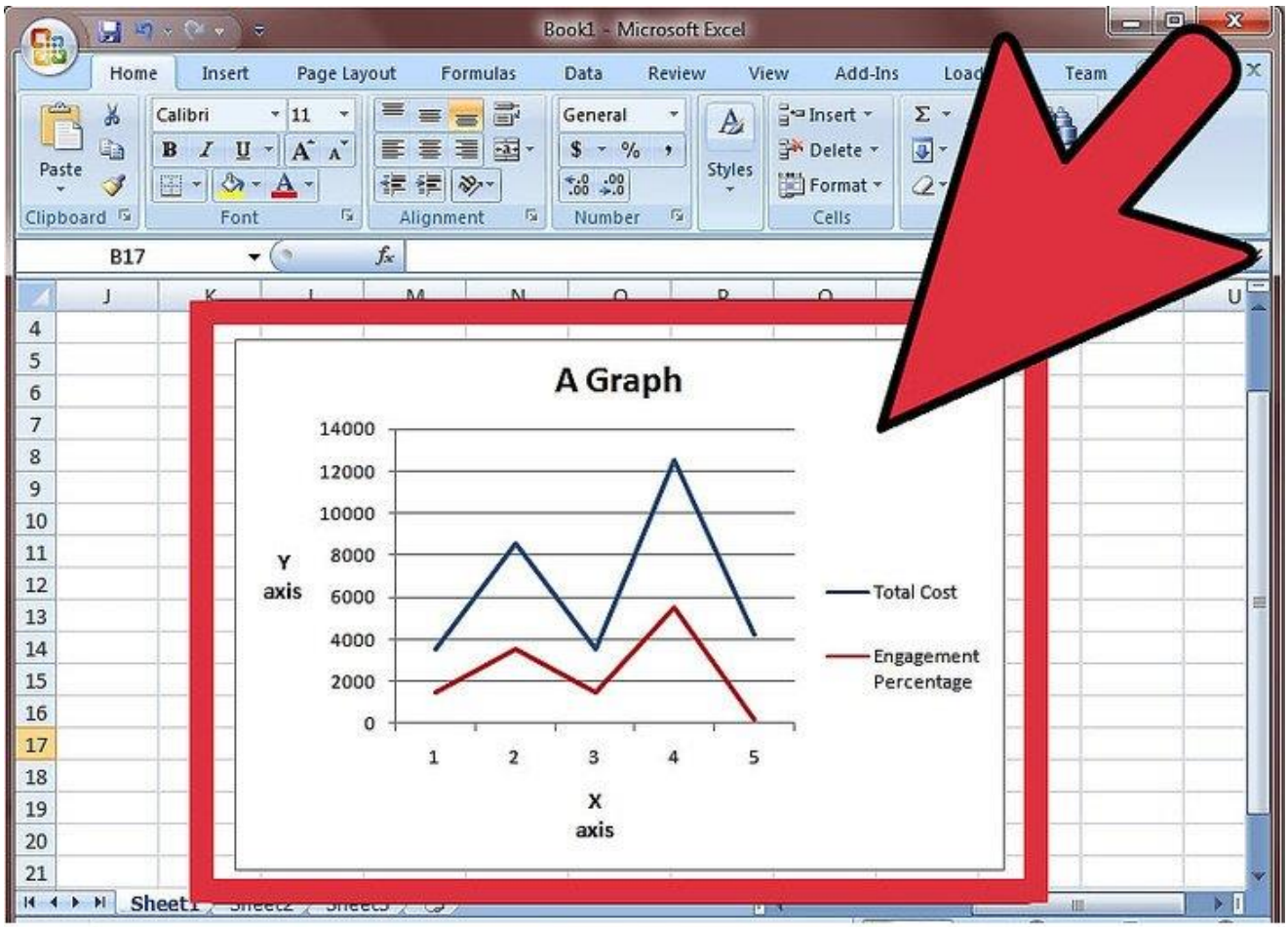


pivot - axis consisting of a short shaft that supports something that turns

pivot - **axis** consisting of a short shaft that supports something that turns

Task 1: Prepare the Lab Environment

1. Log on to MIA-SQL as ADVENTUREWORKS\Student with the password Pa55w.rd
2. In File Explorer, in the D:\Labfiles\Lab01\Starter folder, right-click Setup.cmd, and then click Run as administrator.
3. In the User Account Control dialog box, click Yes.
4. If prompted to continue this operation, type Y, and then press Enter.
5. When the script is complete, press any key to close the window.
6. If you do not have a Power BI login, open Internet Explorer, browse to https://powerbi.microsoft.com/en-us/documentation/powerbi-admin-signing-up-for-power-bi-with-a-new-office-365-trial, and then follow the steps to create an account.
7. In Internet Explorer, type http://mia-sql/sites/adventureworks, and then press Enter, wait for the site to appear.
8. Close Internet Explorer.

Exercise 2: Creating a Power BI Report

Such a warning message is prompted when there existing any **pending change in Query Editor**. We are not able to **bypass** this messgae. To avoid it, please locate to **Query Editor** mode, apply and save **changes**. If you don't want to apply these **changes**, you may need to check the applied steps one by one in each **query** and remove those you don't want.

The sigma sign (Î£, which resembles a sideways M) represents the sum of

Task 1: Import Data into Power BI Desktop

1. Log on to 20778B-MIA-SQL as ADVENTUREWORKS\Student, with a password of Pa55w.rd..
2. On the Taskbar, click Power BI Desktop.
3. In the Welcome to Power BI Desktop window, click Already have a Power BI account? Sign in.
4. In the Sign in dialog box, enter your credentials, and then click Sign in.
5. In the Sign in to your account dialog box, enter your credentials, and then click Sign in.
6. On the Power BI Desktop screen appears, click Get data.
7. In the Get Data dialog box, click SQL Server database, and then click Connect.
8. In the SQL Server database dialog box, in the Server box, type MIA-SQL.
9. In the Database (optional) box, type AdventureWorksDW, and then click OK.
10. If the SQL Server database dialog box appears, leave the default settings unchanged, and then click Connect.
11. If the Encryption Support dialog box appears, click OK.
12. In the Navigator dialog box, select the FactInternetSales check box.
13. Click Select Related Tables, and then click Load.
14. On the File menu, click Save.
15. In the Save As dialog box, browse to the D:\Labfiles\Lab01\Starter\Project folder, and in the File name box, type Adventure Works Sales 1, and then click Save.

space

4. Exercise 2: Creating a Power BI Report

Task 2: Add Visualizations to the Report

1. In the FIELDS pane, expand FactInternetSales, and drag the SalesAmount field onto the report canvas to create a column chart.
2. Expand DimDate, and drag the EnglishDayNameOfWeek field to the Axis property.
3. Move the chart to the top left-hand corner of the canvas, and expand the chart width so the days of the week display in full.
4. In the VISUALIZATIONS pane, click Format, and expand Title.
5. In the Title text box, type Sales by Day of Week.
6. Next to Alignment, click the Center icon.
7. In the FIELDS pane, under FactInternetSales, drag the SalesAmount field onto the report canvas to create a column chart.

8. Under DimDate, drag the CalendarQuarter field onto the chart. Notice that there is only one column.
9. In the VISUALIZATIONS pane, click Fields. Drag the CalendarQuarter field from Value to Axis.
10. Click Format, and expand Title.
11. In the Title text box, type Sales by Calendar Quarter.
12. Next to Alignment, click the Center icon.
13. Expand Data colors, change Show all to On, and for 1, select red, for 2, select blue, and for 3, select yellow.
14. Move the chart to the right of the Sales by Day of Week chart, and expand it so both charts are the same height.
15. In the FIELDS pane, expand DimSalesTerritory, and drag the SalesTerritoryCountry column onto the report canvas under the Sales by Day of Week chart.
16. Under FactInternetSales, drag the SalesAmount field onto the map.
17. Expand the map to show all the values.
18. In the Title text box, type Sales by Country.
19. Next to Alignment, click the Center icon.
20. In the FIELDS pane, expand DimCustomer, and drag the CommuteDistance field onto the report canvas under the Sales by Calendar Quarter chart.
21. Under FactInternetSales, drag the SalesAmount field onto the chart.
22. In the VISUALIZATIONS pane, click Donut chart.
23. In the Title text box, type Sales by Commute Distance.
24. Next to Alignment, click the Center icon.
25. On the File menu, click Save.

Space

5. Exercise 3: Creating a Power BI Dashboard

Task 1: Create a Power BI Dashboard

1. In Power BI Desktop, on the Home tab, click Publish.
2. In the Publish to Power BI dialog box, click My workspace, and then click Select.
3. The report will then be published to the Power BI portal. When the window displays Success, click Open 'Adventure Works Sales 1.pbix' in Power BI to view the report online.
4. In Internet Explorer, if you are prompted to enter your Power BI credentials, enter your email address and password, and wait for the report to open.
5. On the Sales by Day of Week column chart, click Pin visual.
6. In the Pin to dashboard dialog box, click New dashboard, type Adventure Works Sales 1, and then click Pin.
7. On the Sales by Calendar Quarter column chart, click Pin visual.
8. In the Pin to dashboard dialog box, click Existing dashboard, in the list click Adventure Works Sales 1, and then click Pin.
9. On the Sales by Country map chart, click Pin visual.

10. In the Pin to dashboard dialog box, click Existing dashboard, in the list click Adventure Works Sales 1, and then click Pin.
11. On the Sales by Commute Distance donut chart, click Pin visual.
12. In the Pin to dashboard dialog box, click Existing dashboard, in the list click Adventure Works Sales 1, and then click Pin.
13. In the left pane, expand My Workspace.
14. Under DASHBOARDS, click Adventure Works Sales 1.

Space

6. Exercise 3: Creating a Power BI Dashboard

Task 2: Ask Questions of Your Data

1. In the Adventure Works Sales 1 dashboard, click in the Ask a question about your data box.
2. In the Ask a question about your data box, type dim customers.
3. Power BI shows you a table of the data in the DimCustomers table.
4. In the Ask a question about your data box, type how many customer, and the count of 18484 shows in the results.
5. Click Pin visual.
6. In the Pin to dashboard dialog box, click Existing dashboard, in the list click Adventure Works Sales 1, and then click Pin.
7. In the Ask a question about your data box, type who is the oldest customer, and the results show the oldest customer.
8. In the Ask a question about your data box, type how many products are red, and the result is displayed.
9. In the Ask a question about your data box, type which country has the most male customers, and a bar chart shows the results.
10. Click Pin visual.
11. In the Pin to dashboard dialog box, click Existing dashboard, in the list click Adventure Works Sales 1, and then click Pin.
12. In the left pane, under My Workspace, under DASHBOARDS, click Adventure Works Sales 1. Scroll down and notice the two additional tiles now appear.
13. Close Internet Explorer.
14. In the Publishing to Power BI dialog box, click Got it.
15. Close Power BI Desktop.

space

2. Exercise 1: Connecting to Power BI Data

Task 2: Connect to SQL Server from the Power BI Desktop

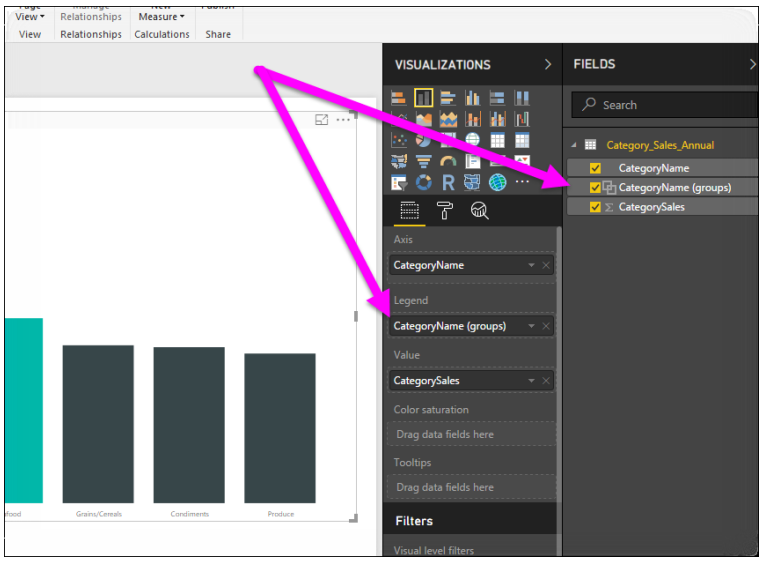
1. On the Taskbar, click Power BI Desktop.

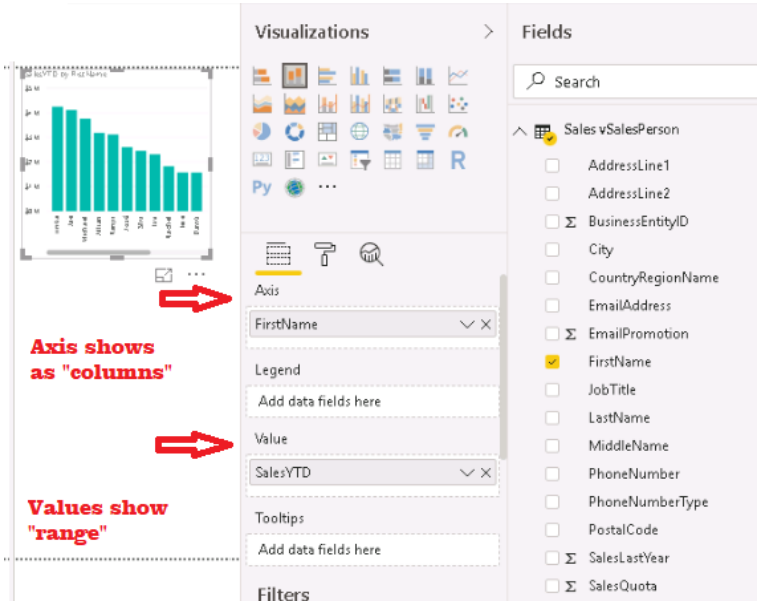
2. In the Welcome to Power BI Desktop window, click Already have a Power BI account? Sign in.
3. In the Sign in dialog box, enter your account credentials, and then click Sign in.
4. In the Sign in to your account dialog box, enter your password credentials, and then click Sign in.
5. On the Power BI Desktop window, in the left-hand pane, click Get data.
6. In the Get Data dialog box, click SQL Server database, and then click Connect.
7. In the SQL Server database dialog box, in the Server box, type MIA-SQL, in the Database (optional) box, type AdventureWorks, and then click OK.
8. In the SQL Server database dialog box, accept the default values, and then click Connect.
9. If an Encryption Support message is displayed, click OK.
10. In the Navigator dialog box, select the Sales.vSalesPerson check box, and then click Load.
11. In the FIELDS pane, expand Sales vSalesPerson to view all the columns.
12. On the Home tab, click Recent Sources, and then click MIA-SQL: AdventureWorks.
13. In the Navigator dialog box, select the Sales.vStoreWithDemographics check box, and then click Load.
14. If the Connection settings dialog box appears, ensure Import is selected, and then click OK.
15. In the FIELDS pane, expand Sales.vStoreWithDemographics to view all the columns.
16. On the Home tab, click the Get Data arrow, and then click SQL Server.
17. In the SQL Server database dialog box, in the Server box, type MIA-SQL, and then in the Database (optional) box, type AdventureWorks.
18. Expand Advanced options, in the SQL statement (optional, required database) box, type the following code, and then click OK:
    a. SELECT TOP 10 P.ProductID, P.Name AS Product, SUM(CAST(LineTotal AS decimal(18,2))) AS LineTotal
    b. FROM Purchasing.PurchaseOrderDetail AS POD
    c. INNER JOIN Production.Product AS P
    d. ON POD.ProductID = P.ProductID
    e. GROUP BY P.ProductID, P.Name
    f. ORDER BY LineTotal DESC
19. If the Connection settings dialog box appears, ensure Import is selected, and then click OK.
20. In the MIA-SQL: AdventureWorks dialog box, click Load.
21. In the FIELDS pane, expand Query1 to view all columns.
22. Right-click Query1, click Rename, type Top 10 Selling Products, and then press Enter.

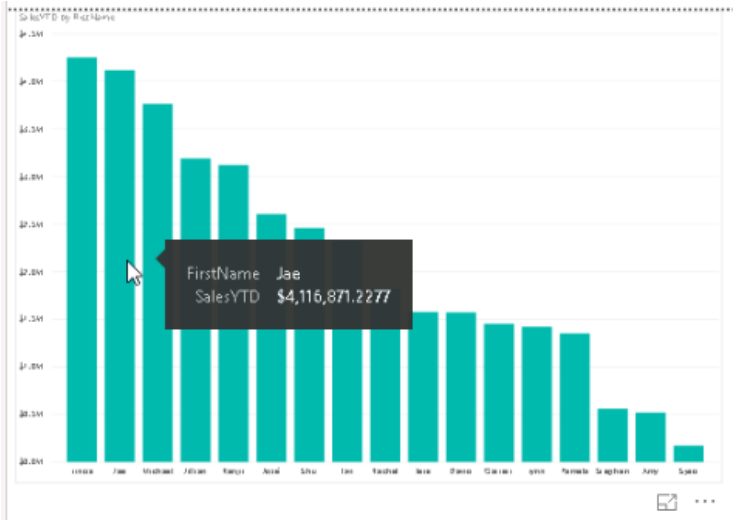
Space

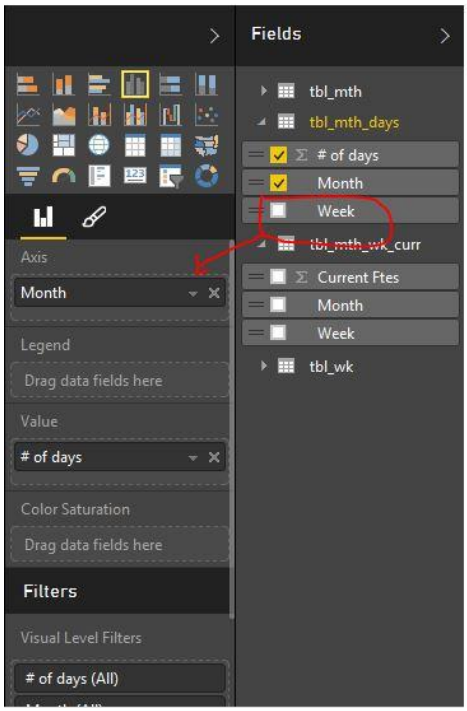
Axis: X – horizontal (left/right), Y – vertical (up/down)

- Axis field – What do I want to show info about? ("noun" column)
- Value field – What info about the "axis" do I want to see? ("number"/"fact"/"measure"/date column – look for sideways "M")


VISUALIZATIONS
FIELDS
Search
Category_Sales_Annual
CategoryName
CategoryName (groups)
CategorySales
Axis
CategoryName
Legend
CategoryName (groups)
Value
CategorySales
Color saturation
Drag data fields here
Tooltips
Drag data fields here
Filters
Visual level filters

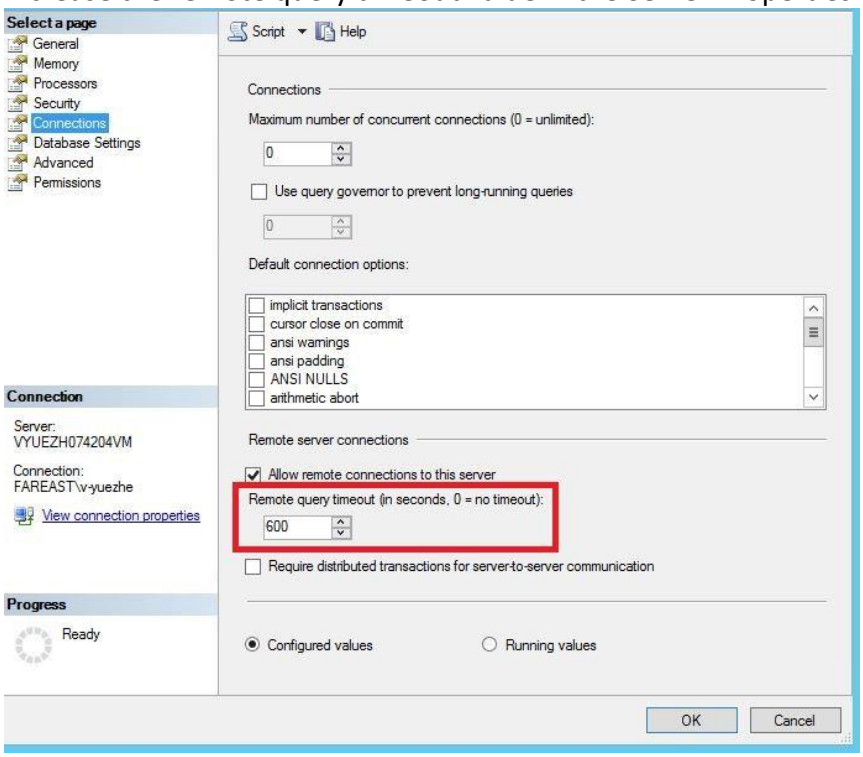

Visualizations
Fields
Search
Sales vSalesPerson
AddressLine1
AddressLine2
BusinessEntityID
City
CountryRegionName
EmailAddress
EmailPromotion
FirstName
JobTitle
LastName
MiddleName
PhoneNumber
PhoneNumberType
PostalCode
SalesLastYear
SalesQuota
Axis
FirstName
Legend
Add data fields here
Value
SalesYTD
Tooltips
Add data fields here
Filters
Axis shows as "columns"
Values show "range"


FirstName Jae
SalesYTD $4,116,871.2277



Debugging LOD

increase the remote query timeout value in the Server Properties of your SQL Server instance.



And specify appropriate value in "Command timeout in minutes (optional)" following steps below, then check if you can refresh successfully in Power BI Desktop.

1. Click on the arrow for "Edit Queries" in your current Power BI Desktop file, select "Data Source Settings" in the dropdown.
   2. Click on "Change Source..." in the Data source settings pop-up window.
   3. Click on Advanced Options in the pop-up window, enter 60 minutes in the "Command timeout in minutes (optional)" textbox, then click OK.
2. Created 07/21/2019