



SCHOOL OF COMPUTER APPLICATION

Project

Descriptive Analytics (DA)

(Group Number -15)

Submitted To: -

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Batch:BCADS21

Submitted By: -

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PRACTICAL

Practical -1

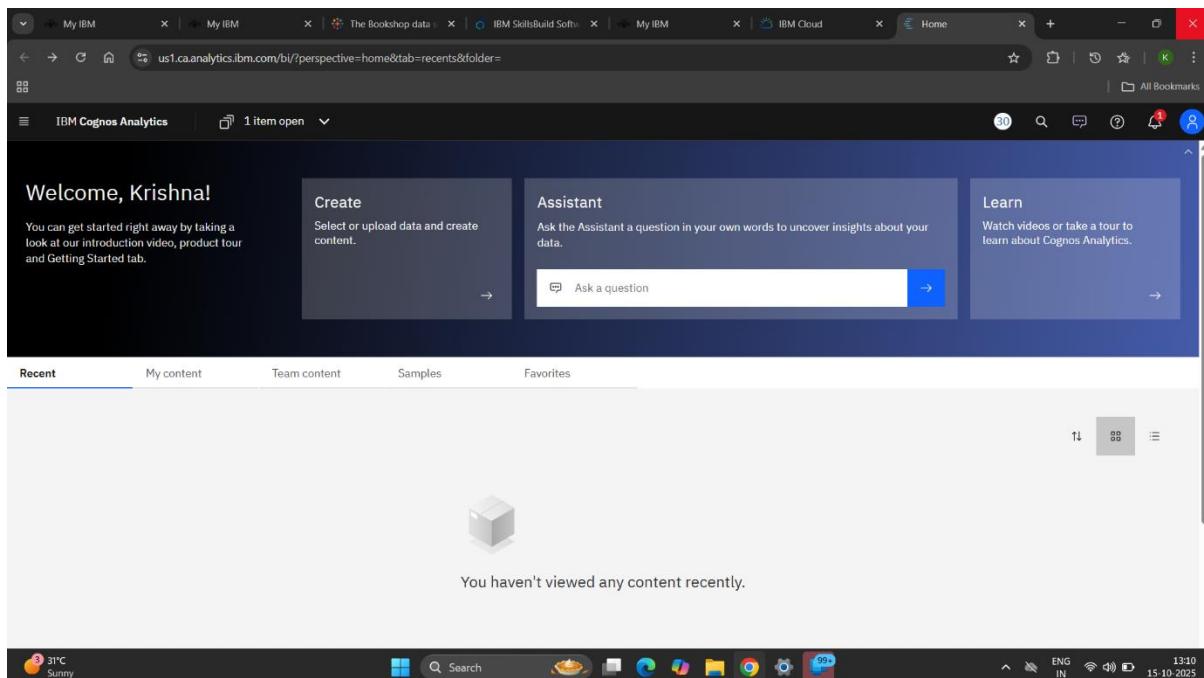
Definition: - Create a list report in IBM Cognos using the Great Outdoors data module to analyse and visualize product performance across different countries. The report should include at least six relevant columns (such as Product Name, Product Line, Country, Year, Quantity Sold, and Revenue) to display and compare product revenues by country over the years.

Outcomes/Learning: - Through this practical, I learned how to create a List Report in IBM Cognos Analytics using the Great Outdoors data module. I gained hands-on experience in selecting relevant columns such as Product Name, Product Line, Country, Year, Quantity Sold, and Revenue. I also learned how to organize and compare product revenues across different countries and years, helping me understand how business data can be analysed for better decision making.

Required Tool: - The required tool will be “IBM Cognos Analytics”

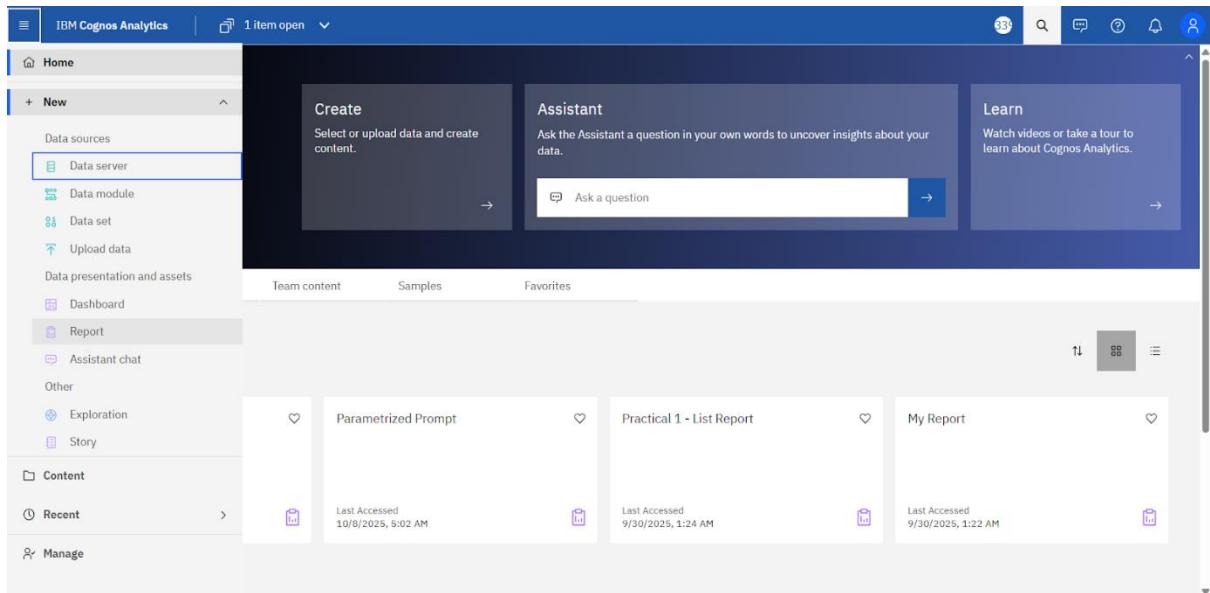
How to create a list report.

Step 1: - IBM Cognos Analytics Tool.



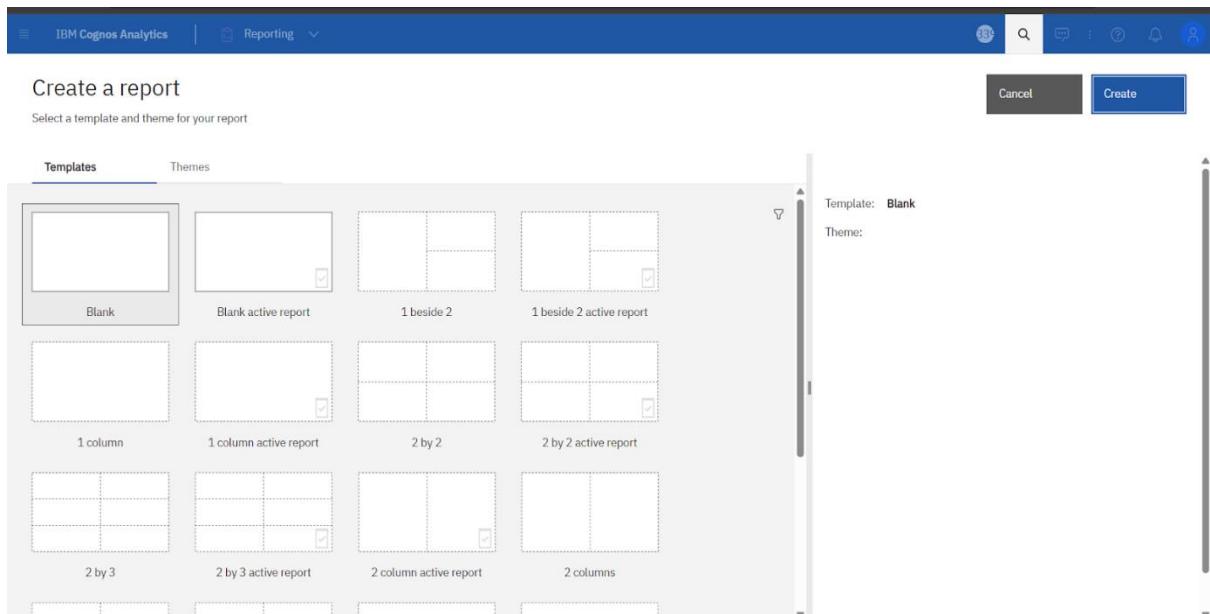
Step 2: - Go to New option then select report, available on the home screen of IBM Cognos tool.

PRACTICAL



The screenshot shows the IBM Cognos Analytics Home page. On the left, there's a navigation sidebar with sections like '+ New', 'Data sources', 'Data presentation and assets', 'Content', 'Recent', and 'Manage'. Under 'Recent', there are three reports listed: 'Parametrized Prompt' (last accessed 10/8/2025, 5:02 AM), 'Practical 1 - List Report' (last accessed 9/30/2025, 1:24 AM), and 'My Report' (last accessed 9/30/2025, 1:22 AM). The main area has a 'Create' button, an 'Assistant' section with an 'Ask a question' input, and a 'Learn' section.

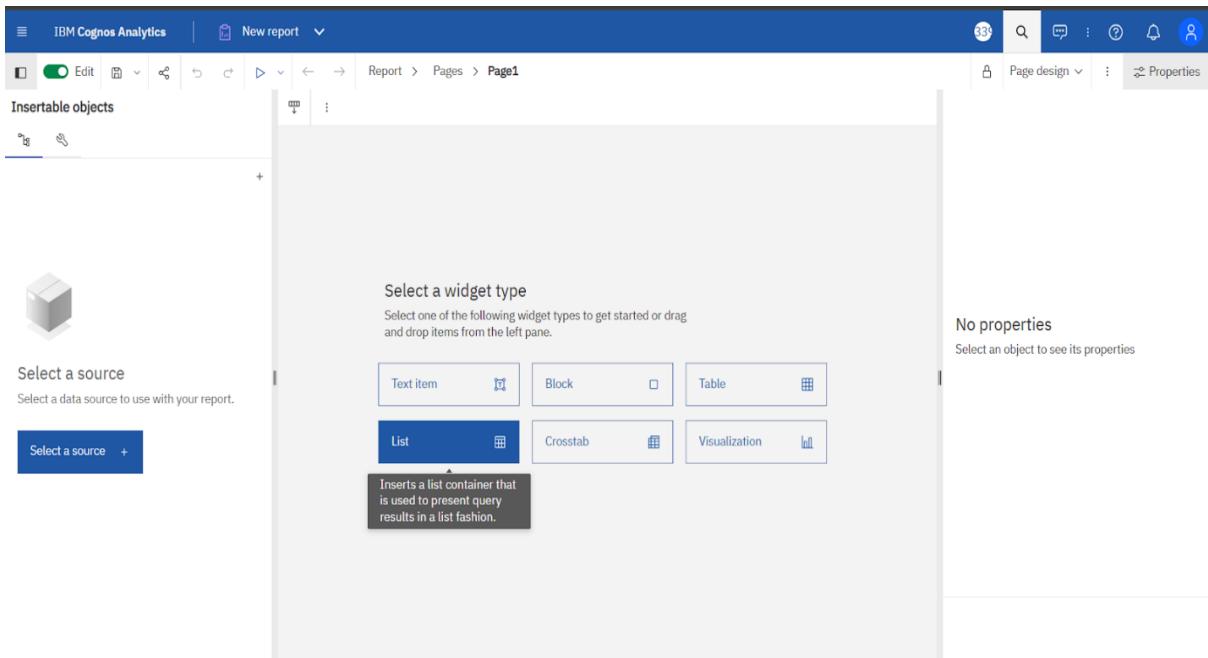
Step 3: - Select theme and templates and theme which ever you want to apply.



The screenshot shows the 'Create a report' dialog. It has tabs for 'Templates' and 'Themes'. The 'Templates' tab is selected, showing various layout options: 'Blank', 'Blank active report', '1 beside 2', '1 beside 2 active report', '1 column', '1 column active report', '2 by 2', '2 by 2 active report', '2 by 3', '2 by 3 active report', '2 column active report', and '2 columns'. A preview pane on the right shows a blank report with the text 'Template: Blank' and 'Theme:'. There are 'Cancel' and 'Create' buttons at the bottom right.

Step 4: - Select the source for importing data into the report, and select the list type widget to present the data in the form of report.

PRACTICAL



Step 5: - Select a Source then select Samples < Data < Create outdoor data module

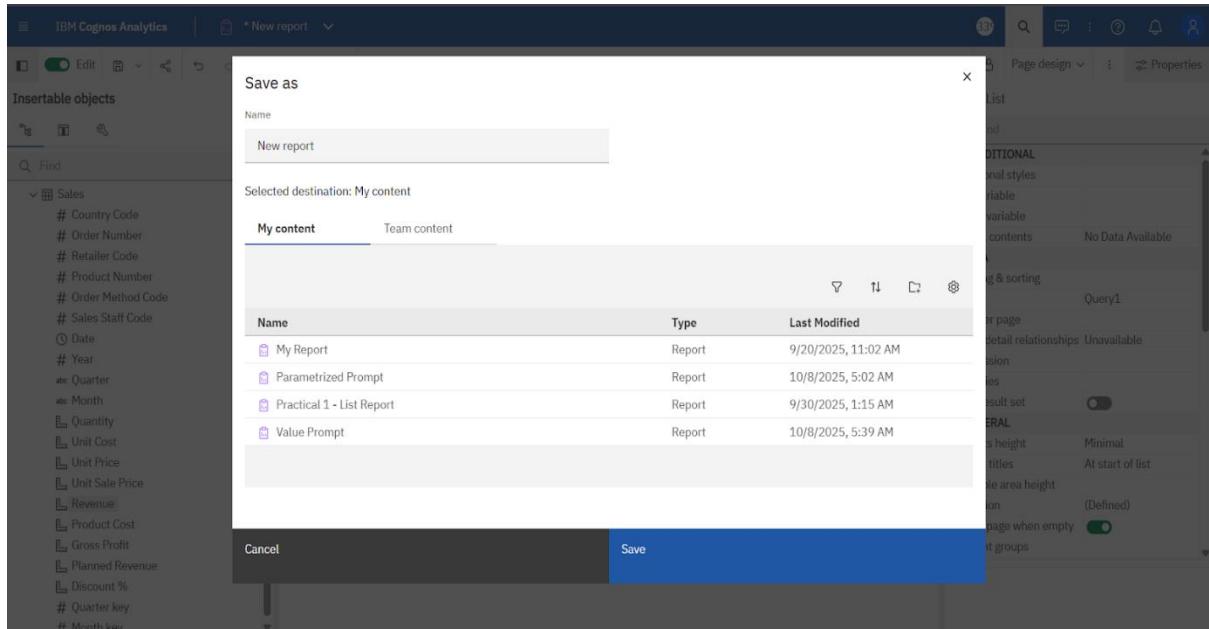
This screenshot shows a modal dialog box titled "Open" in the IBM Cognos Analytics interface. The dialog is set to "Team content". Inside, under "Team content / Samples / Data", a list of data modules is shown in a table format:

Name	Type	Last Modified
Source files	Folder	10/7/2024, 2:48 PM
California website visits	Data module	10/7/2024, 2:48 PM
Coffee sales and marketing	Data module	10/15/2024, 2:06 AM
Customer analysis	Data module	10/7/2024, 2:48 PM
Great outdoors data module	Data module	10/16/2024, 3:06 PM
NYPD motor vehicle collisions	Data module	10/7/2024, 2:48 PM
Sample data module	Data module	10/7/2024, 2:48 PM
Storm events 2015	Data module	10/7/2024, 2:48 PM

At the bottom of the dialog are "Cancel" and "Open" buttons.

Step 6: - Selecting the relevant column such as product name, product line , country, year, quantity sold, and revenue.

PRACTICAL



PRACTICAL

Practical -2

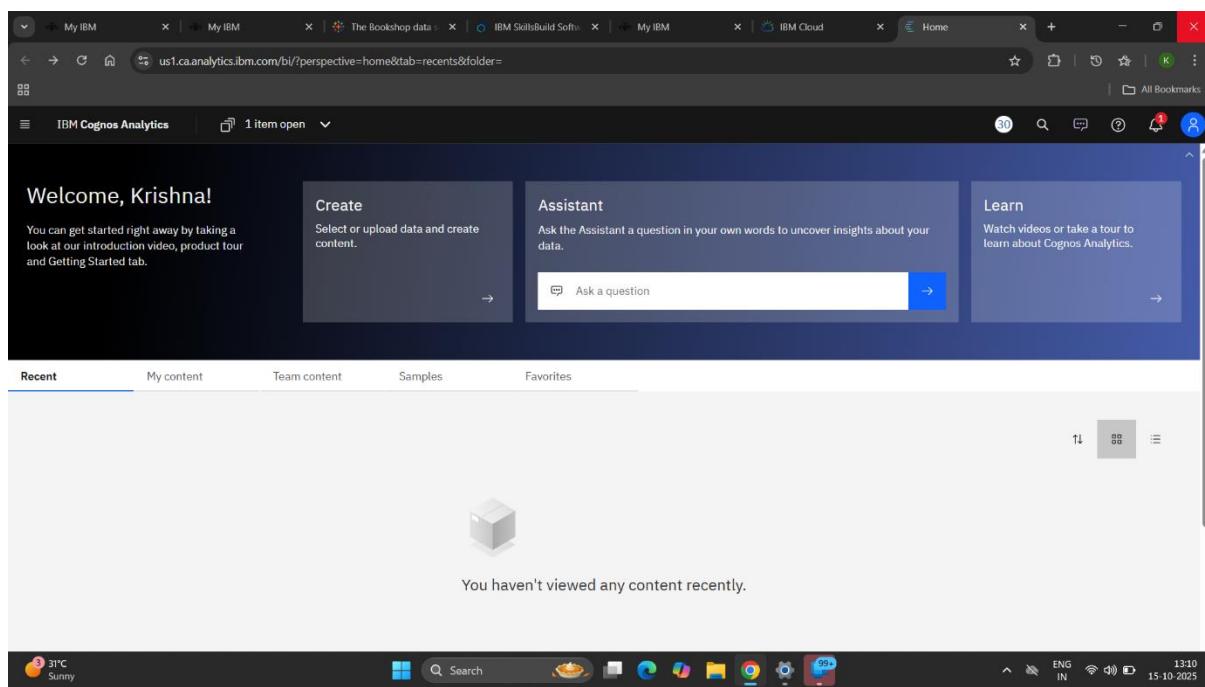
Definition: - Create a List report in IBM Cognos using the Great Outdoors data module to analyse and visualize product performance across different countries and years. The report should include at least six relevant columns such as Product Name, Product Line, Country, Year, Quantity Sold, and Revenue. Use summarizes functions to calculate total or average values, and apply sorting, grouping, and formatting to organize the data clearly and make the report visually informative and easy to interpret.

Outcomes/Learning: - Learner's construct knowledge by performing tasks like report creation, applying grouping, sorting, filtering, summarizing, and formatting directly within the Cognos interface

Required Tool: - The required tool will be "IBM Cognos Analytics"

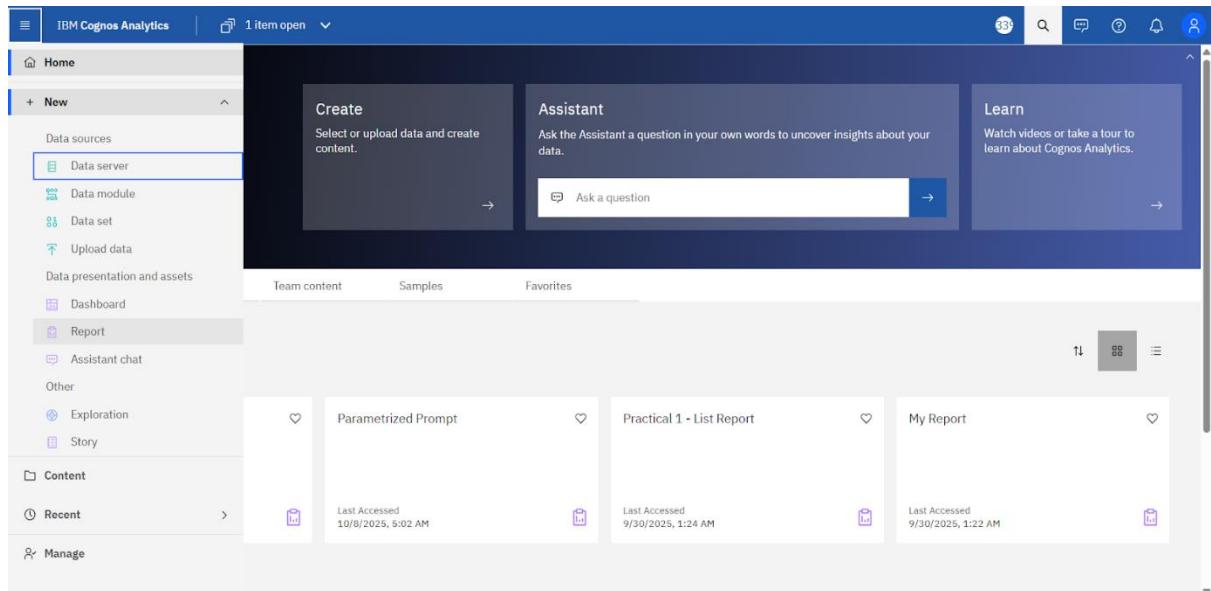
How to create a list report.

Step 1: - IBM Cognos Analytics Tool.



Step 2: - Go to New option then select report, available on the home screen of IBM Cognos tool.

PRACTICAL

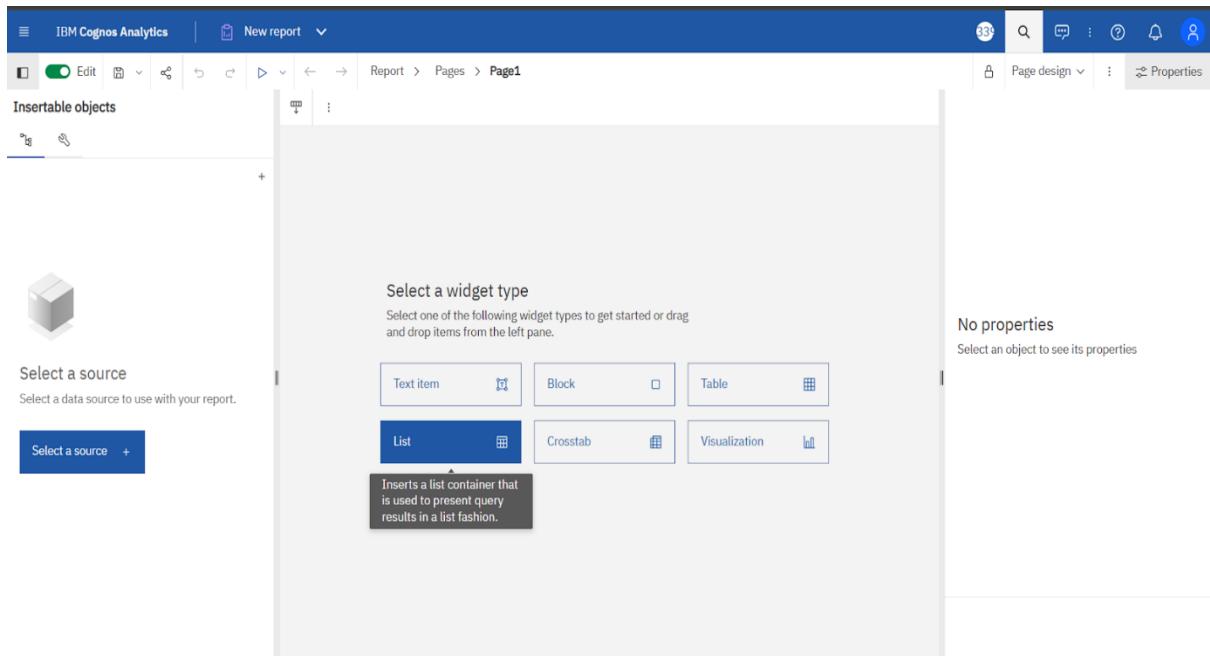


Step 3: - Select theme and templates and theme which ever you want to apply.

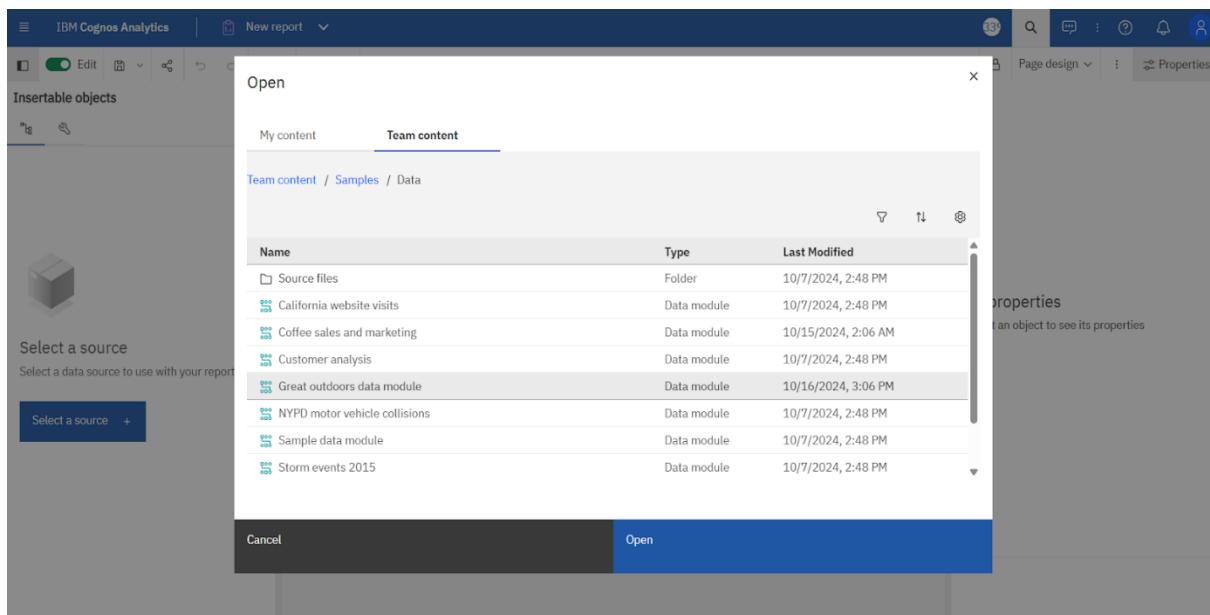
The screenshot shows the 'Create a report' dialog in IBM Cognos Analytics. It displays a grid of report templates under the 'Templates' tab. The grid includes: Blank, Blank active report, 1 beside 2, 1 beside 2 active report; 1 column, 1 column active report, 2 by 2, 2 by 2 active report; 2 by 3, 2 by 3 active report, 2 column active report, and 2 columns. To the right of the grid, settings for 'Template' (Blank) and 'Theme' are visible, along with 'Cancel' and 'Create' buttons at the top right.

Step 4: - Select the source for importing data into the report, and select the list type widget to present the data in the form of report.

PRACTICAL



Step 5: - Select a Source then select Samples < Data < Create outdoor data module



Step 6: - Selecting the relevant column such as product name, product line , country, year, quantity sold, and revenue.

PRACTICAL

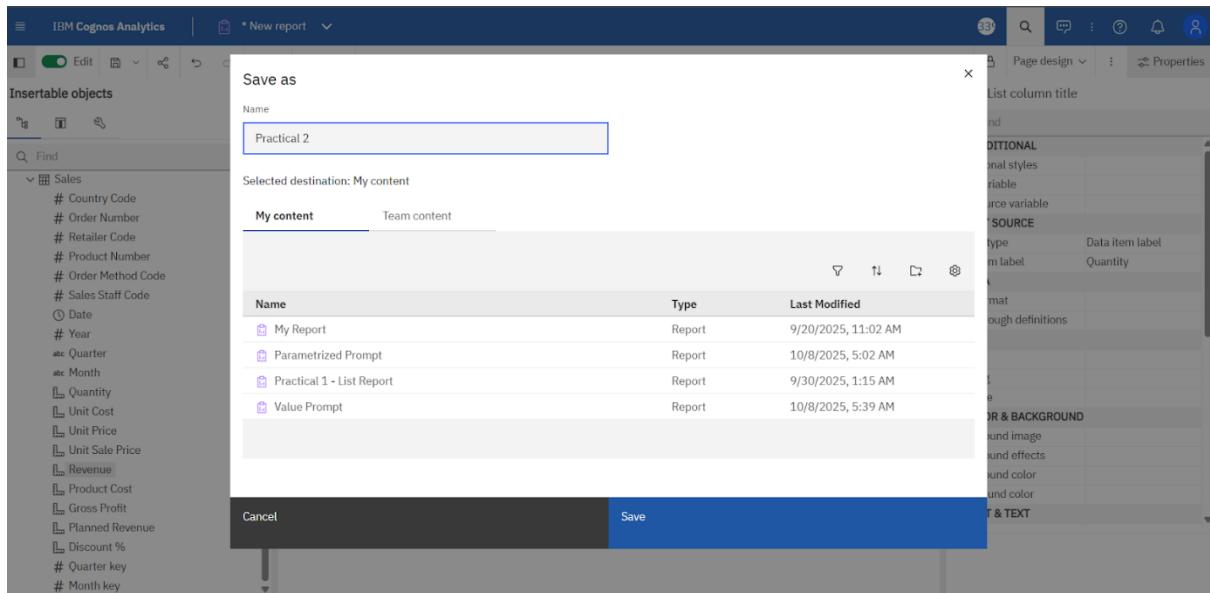
The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Insertable objects' pane is open, displaying a tree structure of data items under the 'Sales' category, including 'Country', 'Year', 'Quantity', and 'Revenue'. In the center, a table is displayed with columns: Product, Product Line, Country, Year, Quantity, and Revenue. The 'Country' column is highlighted with a blue background. On the right, the 'Properties' panel is open, showing settings for the selected 'Country' column. Under the 'GENERAL' section, 'Contents height' is set to 'Minimal' and 'Column titles' is set to 'At start of list'. The 'COLOR & BACKGROUND' section is expanded, showing 'Background color' set to 'Gray'. The 'Font & Text' section is also visible.

Step 7: - Select the “column” which have to colour after that click on “background colour” option to colour and just after click on “font” icon to change the preferable font.

This screenshot is similar to the previous one but shows a different state of the report. The 'Country' column in the table is now highlighted with a yellow background. The properties panel on the right shows the 'Color & Background' section expanded, with 'Background color' set to 'Yellow'. The 'Font & Text' section is also visible.

Step 8: - After that use summarized function through click the column in which have to summarized after click on “summarized tool”.

PRACTICAL



PRACTICAL-3

DEFINITION: Create a crosstab report in IBM Cognos using the Great Outdoors data module to analyse and visualize data that shows parent-child relationships between different columns — such as Product Line and Product Type, Country and City, and Year and Quarter. The report should help in comparing and understanding hierarchical data relationships and performance trends across multiple dimensions...

Outcome: - To create a cross-tab report in IBM Cognos Analytics that shows parent-child relationships and analyses hierarchical data, you will utilize the drag-and-drop feature to place related fields on the rows and columns. This demonstrates an advanced cross-tab report.

REQUIRED TOOL: IBM COGNOS

WORKING / PERFORM: 1. OPEN THE IBM COGNOS TOOL.
2. CLICK ON PRESENT DATA AND THEN REPORT.
3. THEN CLICK ON CREATE.
4. THEN ON CROSSTAB.
5. NOW WORK ON THE FORMAT, RUN IT AND SAVE IT.

OUTCOME / LEARNING: FROM THIS PRACTICAL WE WILL LEARN HOW TO CREATE CROSSTAB AND THE 3 TYPE OF CROSSTAB.

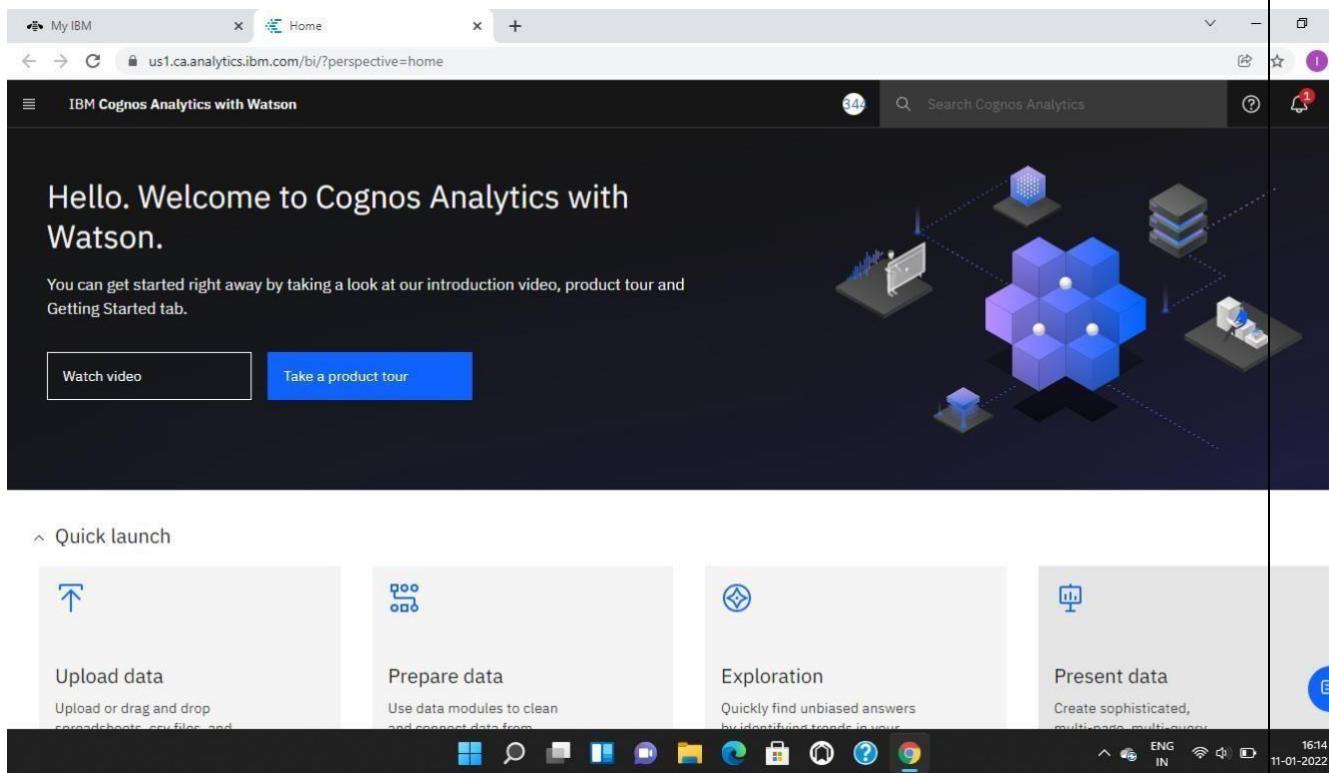
PRACTICAL

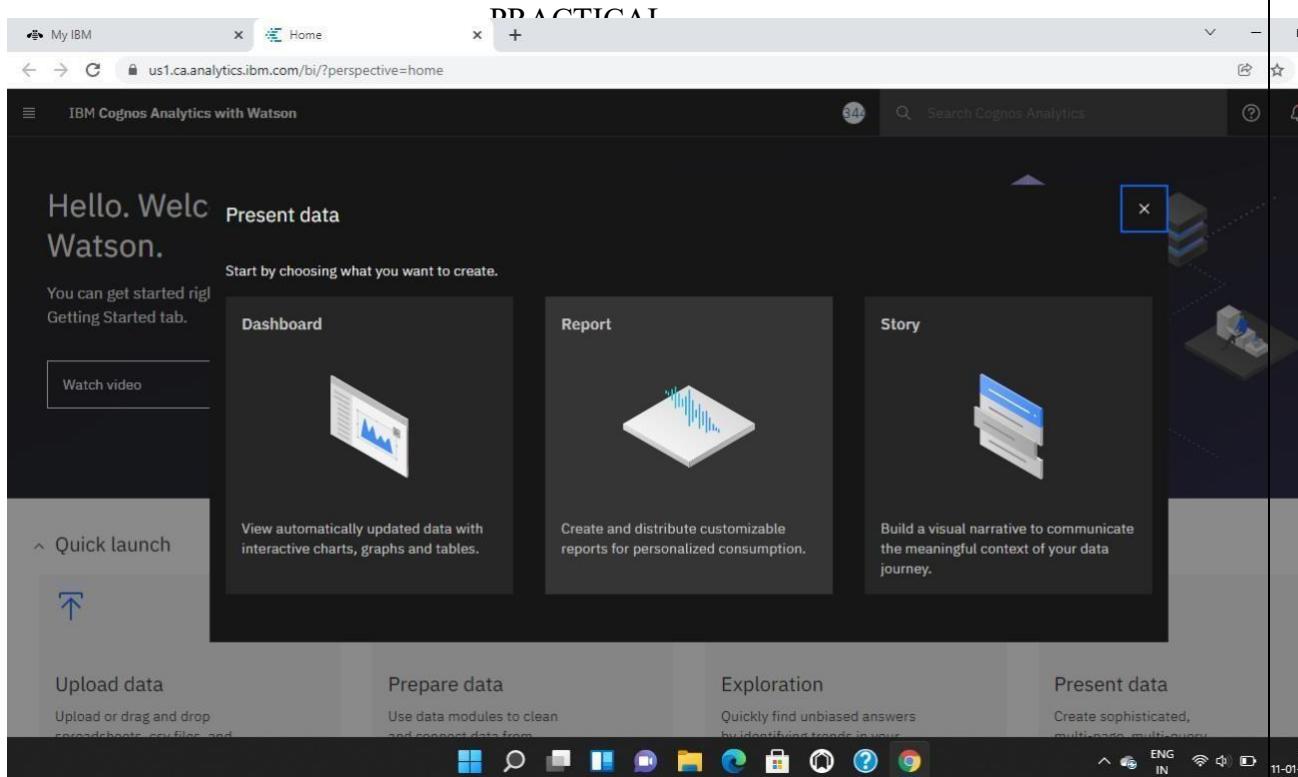
A: SIMPLE CROSSTAB REPORT.

1.OPEN AND LOGIN ON THE IBM COGNOS TOOL.

2.NOW CLICK ON PRESENT DATA.

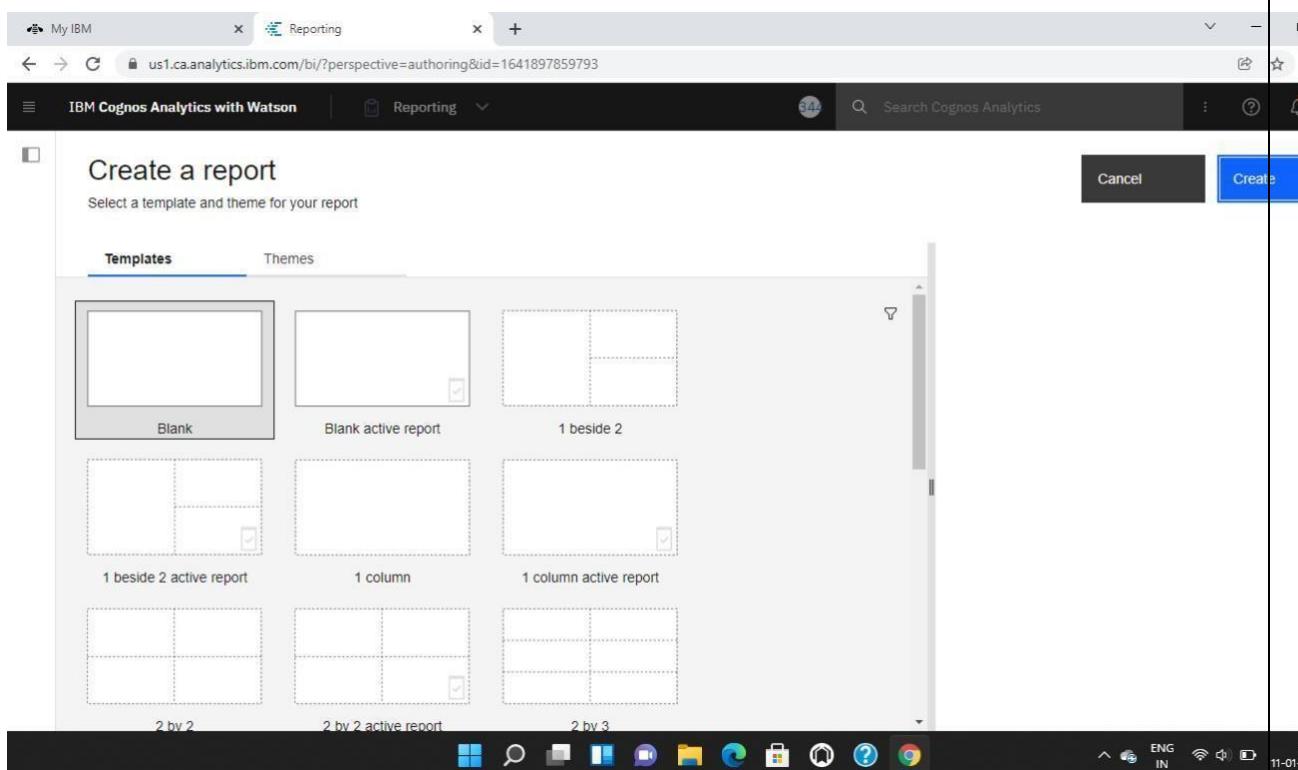
3.CLICK ON THE REPORT OPTION FROM THE THREE OPTIONS.





The screenshot shows the IBM Cognos Analytics with Watson home page. At the top, there's a navigation bar with tabs for 'My IBM' and 'Home'. The main header reads 'IBM Cognos Analytics with Watson' and 'PRESENT DATA'. Below this, a message says 'Hello. Welcome Watson.' and 'Start by choosing what you want to create.' There are three main options: 'Dashboard' (represented by a chart icon), 'Report' (represented by a waveform icon), and 'Story' (represented by a document icon). Each option has a brief description. On the left, there's a 'Quick launch' section with a 'Watch video' button. Below the main options are sections for 'Upload data', 'Prepare data', 'Exploration', and 'Present data'. The bottom of the screen shows a Windows taskbar with various pinned icons.

4.AFTER THAT SELECT THE TYPE OF



The screenshot shows the 'Create a report' dialog box. The title bar says 'Create a report'. Below it, a sub-header says 'Select a template and theme for your report'. There are two tabs: 'Templates' (which is selected) and 'Themes'. Under the 'Templates' tab, there are nine grid-based templates arranged in three rows of three. The first row contains 'Blank', 'Blank active report', and '1 beside 2'. The second row contains '1 beside 2 active report', '1 column', and '1 column active report'. The third row contains '2 by 2', '2 by 2 active report', and '2 by 3'. Each template has a small preview icon and a checkmark icon. On the right side of the dialog, there are 'Cancel' and 'Create' buttons. The bottom of the screen shows a Windows taskbar with various pinned icons.

TEMPLATE AND THEME AND

THEN CLICK ON CREATE.

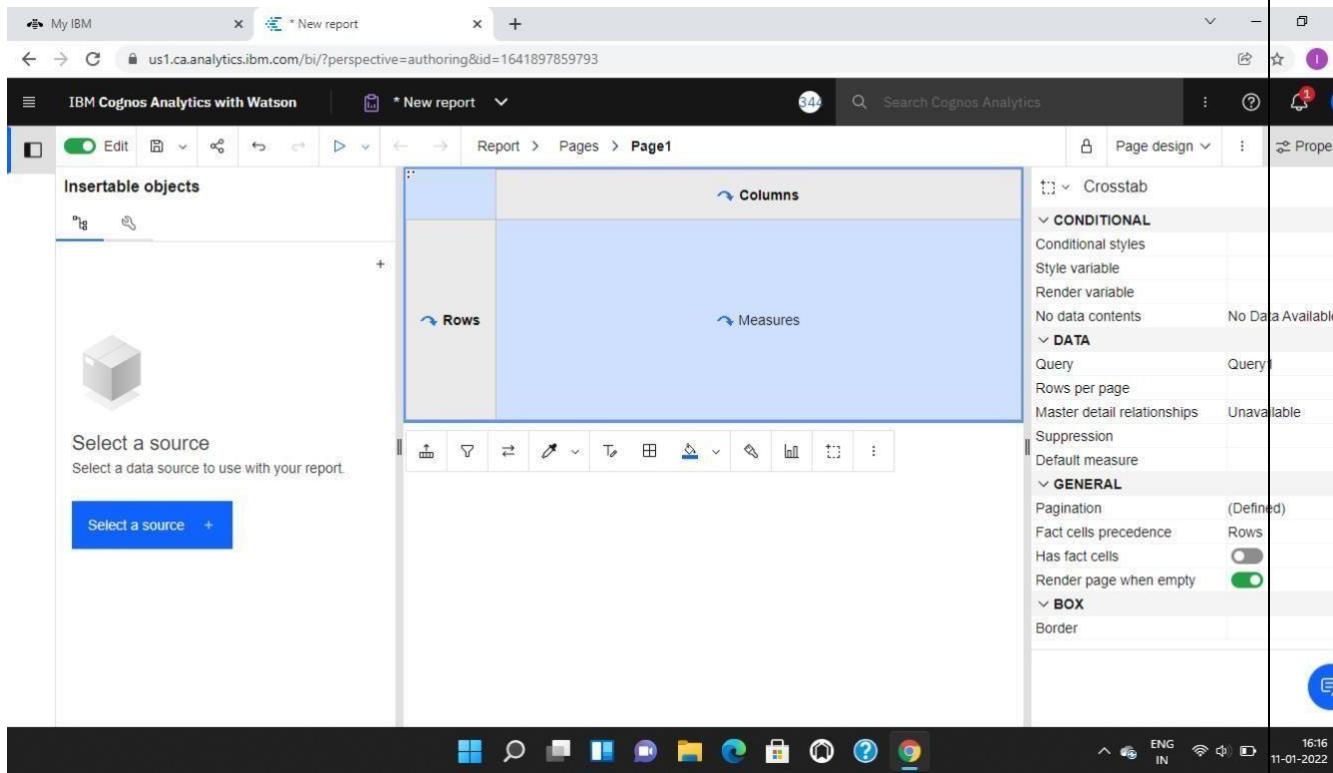
**5.NOW WE WILL SELECT THE REPORT TYPE
'CROSSTAB' AND MOVE FORWARD.**

The screenshot shows the IBM Cognos Analytics with Watson report authoring interface. On the left, there's a sidebar titled 'Insertable objects' with icons for Text item, Block, Table, List, Crosstab, and Visualization. A tooltip for the 'Crosstab' icon is displayed, stating: 'Inserts a crosstab container that is used to render the results of a query that aggregates data, and then arranges it in a two-dimensional grid.' The main workspace is labeled 'Page1' and contains a placeholder for a data source.

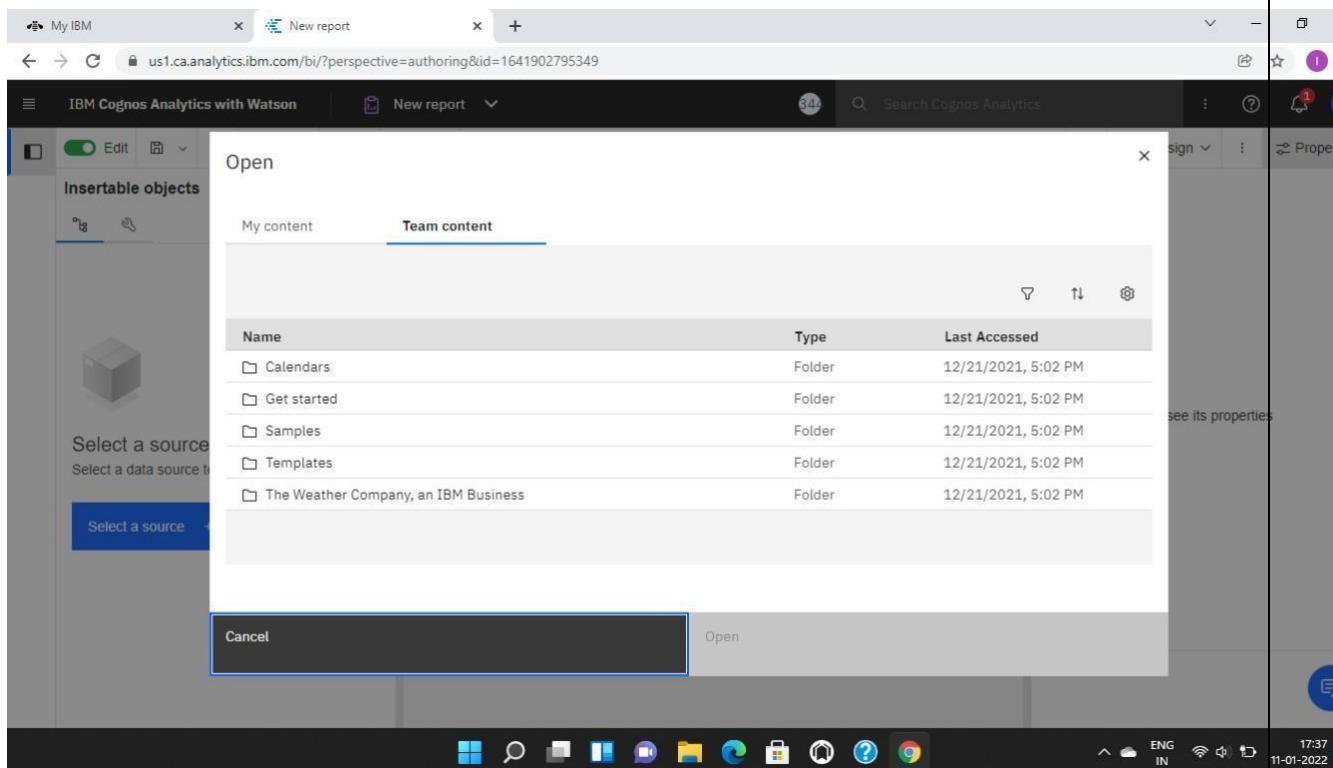
6.A POPUP WILL COME AND WE CAN RENAME THE REPORT IF WE WANT TO AND THEN CLICK OK.

The screenshot shows the same report authoring interface as above, but with a 'Object and query name' dialog box open. The dialog has fields for 'Name' (set to 'Crosstab') and 'Query Name' (set to 'Query1'). There is also a checkbox for 'Show this dialog in the future'. At the bottom are 'Cancel' and 'OK' buttons. The rest of the interface is visible in the background.

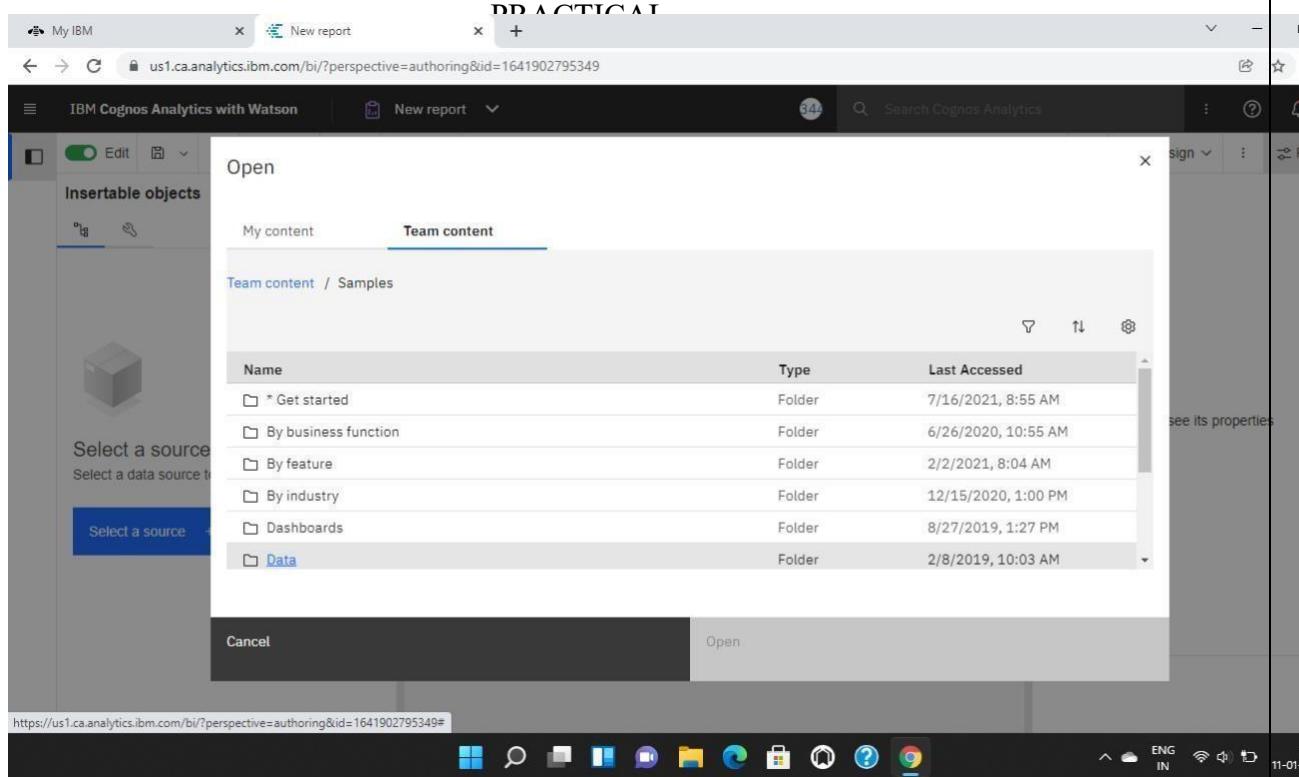
PRACTICAL



7.AFTER CLICKING ON OK WE WILL GO AT THE PAGE OF THE FORMAT .



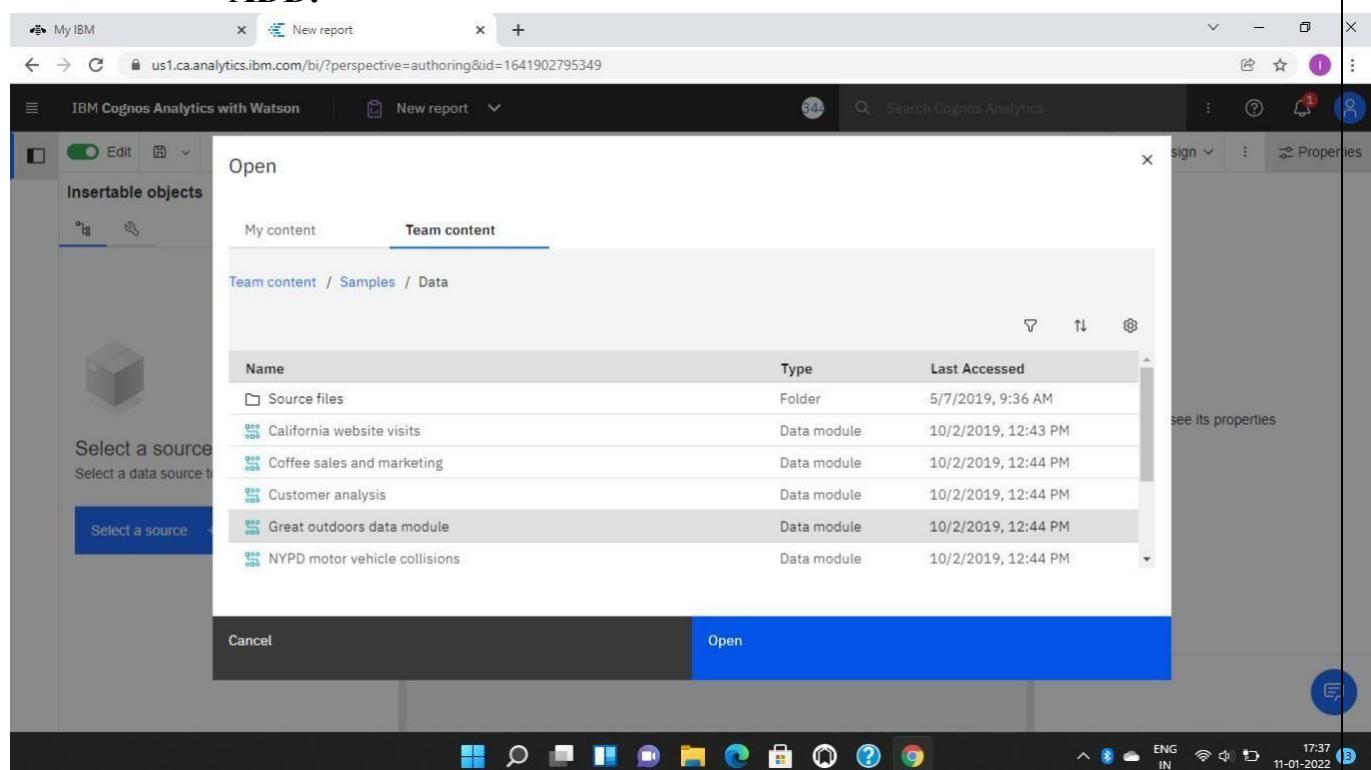
8. WE WILL NOW CLICK ON THE SELECT A SOURCE OPTION GIVEN AT THE LEFT.



9. WE WILL NOW CLICK ON SAMPLES.

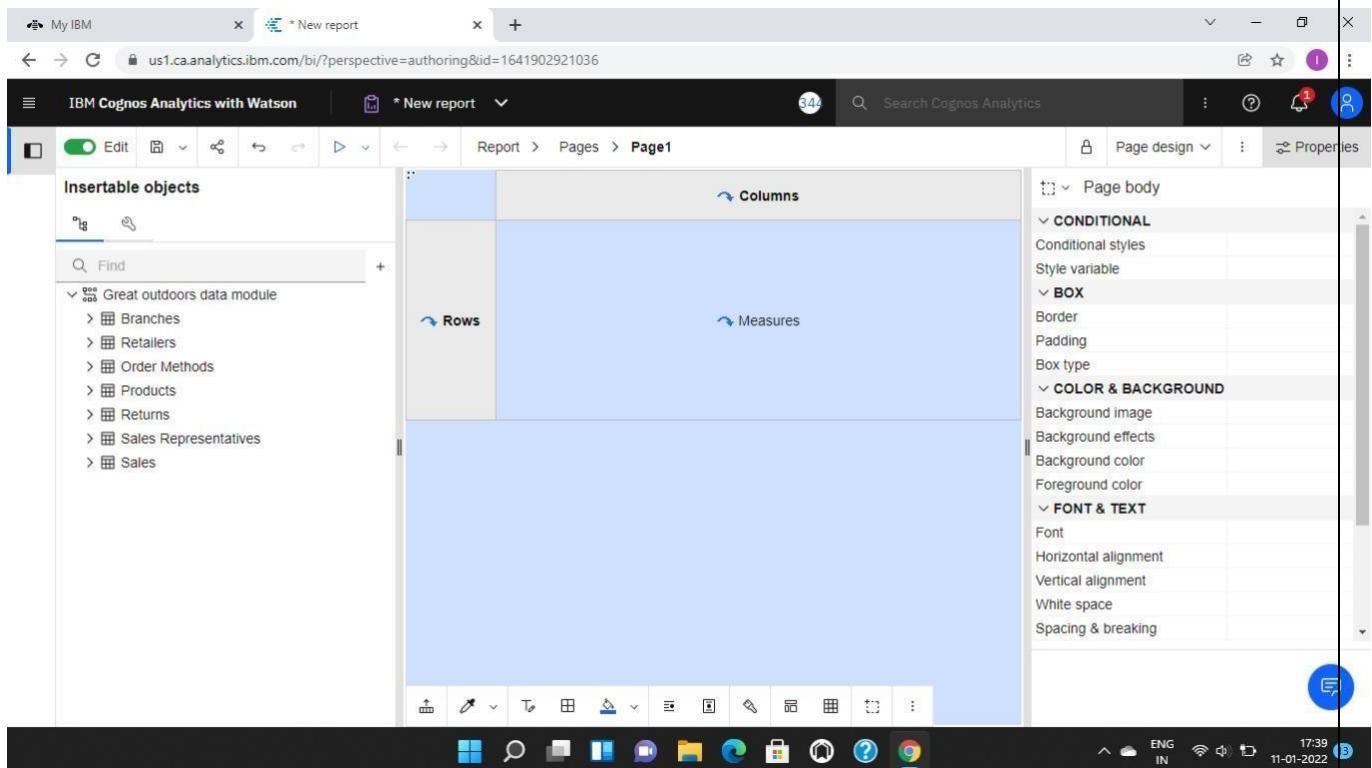
10. AFTER THAT WE WILL CLICK ON DATA.

11. NOW CLICK ON ‘GREAT OUTDOORS DATA MODULE’ AND CLICK ON ADD.



PRACTICAL

12. THE DATASETS WILL NOW APPEAR ON THE LEFT HAND SIDE OF THE CROSSTAB FORMAT.



13. WE WILL NOW BE ABLE TO SELECT ROWS, COLUMNS AND MEASURES.

14. HERE WE ARE TAKING PRODUCT LINE ON THE ROW COLUMN. BY DRAG AND DROP METHOD WE WILL PUT PRODUCT LINE AT THE ROWS PLACE AND YEAR AT THE COLUMNS PLACE.

PRACTICAL

The screenshot shows the IBM Cognos Analytics with Watson interface. On the left, there's an 'Insertable objects' pane with various sales-related items like Country Code, Order Number, Retailer Code, etc. The main area displays a crosstab structure with two columns and three rows. The first row has headers '<#Year#>' and '<#Year#>'. The second row has header '<#Product Line#>' and contains a single cell with a blue background and the text '<#Product Line#>'. The third row has header '<#Product Line#>' and also contains a single cell with a blue background and the text '<#Product Line#>'. A 'Measures' icon is located in the top right corner of the crosstab. To the right of the crosstab is a properties panel for 'Crosstab' settings. A small OneDrive notification bubble in the bottom right corner says 'Screenshot saved'.

15. AFTER THIS WE WILL NOW SELECT THE FIELDS FROM THE DATASETS FOR THE MEASURES. HERE ,WE ARE SELECTING REVENUE.

This screenshot shows the same IBM Cognos interface as above, but the crosstab now displays 'Revenue' in the first column of the measures section. The first column header is 'Revenue' and it contains two rows: '<#Product Line#>' and another '<#Product Line#>'. The other two columns remain '<#Year#>' and '<#Year#>'. The properties panel on the right is identical to the previous screenshot, showing settings for 'Crosstab' and 'GENERAL' like Pagination, Fact cells precedence, and Has fact cells.

IT WILL BE SHOWN AS IT IS SHOWN IN THE ABOVE PICTURE.

16. NOW WE WILL SAVE THE REPORT.BY CLICKING ON THE SHOWN ICON FROM THE RIBBON.

The screenshot shows two windows of the IBM Cognos Analytics with Watson application. The top window is a 'Save as' dialog box titled 'Save as' with the sub-titles 'My content' and 'Team content'. It has a 'Name' field containing 'New report' and a list of items under 'My content': 'archive (1).zip', 'archive (2).zip', and 'New data module 1'. Below the list are 'Cancel' and 'Save' buttons, with 'Save' highlighted in blue. The bottom window shows the report editor with a table containing three rows. The first row has a header 'Revenue' and columns '<#Year#>' and '<#Year#>'. The second and third rows both have the value '<#Product Line#>' in the first column and '<#1234#>' in the other two columns. The report navigation bar at the top includes 'Report > Pages > Page1'. On the right side of the editor, there is a properties panel with sections like 'Page body', 'CONDITIONAL', 'BOX', 'COLOR & BACKGROUND', 'FONT & TEXT', and 'Page design'.

17. WE WILL SAVE IT IN MY CONTENT AND CAN RENAME IT .AFTER THAT WE WILL CLICK ON SAVE.

18. WE WILL NOW GO BACK THE PAGE OF THE REPORT AND WILL RUN IT AS HTML.

The screenshot shows the IBM Cognos Analytics with Watson interface. On the left, there's a sidebar titled "Insertable objects" with a search bar. The main area displays a report page with a table structure. The table has three columns: "Revenue" (row 1), "<#Year#>" (row 2), and "<#Year#>" (row 3). Each row contains two placeholder cells: "<#Product Line#>". The right side of the screen features a toolbar with various icons and a context menu open, showing options like "Crosstab", "Conditional styles", "Style variable", etc. The bottom of the screen shows a Windows taskbar with several application icons.

This screenshot is similar to the one above but shows a different report design. The table structure is identical, but it is now enclosed in a dashed blue border, indicating it is selected or being edited. The "Insertable objects" sidebar on the left is expanded to show a "Great outdoors data module" section. The bottom of the screen shows a Windows taskbar.

5. WE WILL NOW SAVE THE REPORT .

PRACTICAL

The screenshot shows the IBM Cognos Analytics interface with a report titled "Page1". On the left, the "Insertable objects" pane lists various data items under categories like Branches, Retailers, Order Methods, Products, Returns, Sales Representatives, and Sales. A crosstab is displayed in the center, showing revenue data. The columns are labeled "#Year#", "#Quarter#", and "#Quarter#". The rows are labeled "<#Product Line>" and "<#Product Type>". The data cells contain placeholder values like <#1234#>. The right side of the screen features a context menu for the crosstab, which includes options for Crosstab, Conditional styles, Style variable, Render variable, No data contents, DATA (with sub-options for Query, Rows per page, Master detail relationships, Suppression, Default measure), GENERAL (with sub-options for Pagination, Fact cells precedence, Has fact cells, Render page when empty), and a OneDrive integration section.

This screenshot is similar to the one above, showing the same report structure and data items in the "Insertable objects" pane. However, the crosstab in the center has a large dashed blue rectangle drawn around its entire structure, indicating it is selected or being modified. The context menu on the right is also visible, showing the same set of options as the first screenshot.

C. DISCONTINUOUS CROSSTAB:

**1. THE PROCESS WILL REMAIN SAME UNTIL
MAKING OF THE COMPLEX CROSSTAB .**

PRACTICAL

The screenshot shows the IBM Cognos Analytics with Watson interface. A context menu is open over a crosstab titled 'Revenue'. The menu path 'Insertable' -> 'Save As...' is highlighted. Other options like 'Convert to Template' and 'Convert to Active Report' are also visible. The main workspace displays a crosstab with four columns labeled '<#Year>', '<#Quarter#>', '<#Quarter#>', and '<#Quarter#>'. The rows are labeled '<#Product Line#>' and '<#Product Type#>'. The right side of the screen shows a 'Page design' panel with various styling options like 'Page body', 'Conditional styles', 'Style variable', 'BOX', 'Border', 'Padding', 'Box type', 'COLOR & BACKGROUND', 'Background image', 'Background effects', 'Background color', 'Foreground color', 'FONT & TEXT', 'Font', 'Horizontal alignment', 'Vertical alignment', 'White space', and 'Spacing & breaking'.

2. AND WE WILL ADD A FIELD AT THE END OF THE CROSSTAB.

3. AND IT WILL LOOK LIKE THIS:

4. WE WILL NOW SAVE THE REPORT.

The screenshot shows the 'Save as' dialog box in the IBM Cognos Analytics with Watson interface. The 'Name' field is set to 'New report'. Below it, the 'Selected destination' is 'My content'. The 'My content' tab is selected, showing a list of existing items: 'archive (1).zip', 'archive (2).zip', and 'New data module 1'. At the bottom of the dialog are 'Cancel' and 'Save' buttons. The background shows the report design from the previous screenshot.

5 WE WILL SAVE IT IN MY CONTENT.

PRACTICAL

D. WE WILL NOW CHOOSE A MEASURABLE ITEM FOR THE COLUMN AND IT WILL ALSO SHOW IN THE MEASURES AREA:

1. WE WILL PUT THE PRODUCT LINE IN THE ROW.
2. AND IN THE COLUMN WE WILL TAKE REVENUE .
3. REVENUE WILL AUTOMATICALLY SHOW IN THE MEASURES TOO.

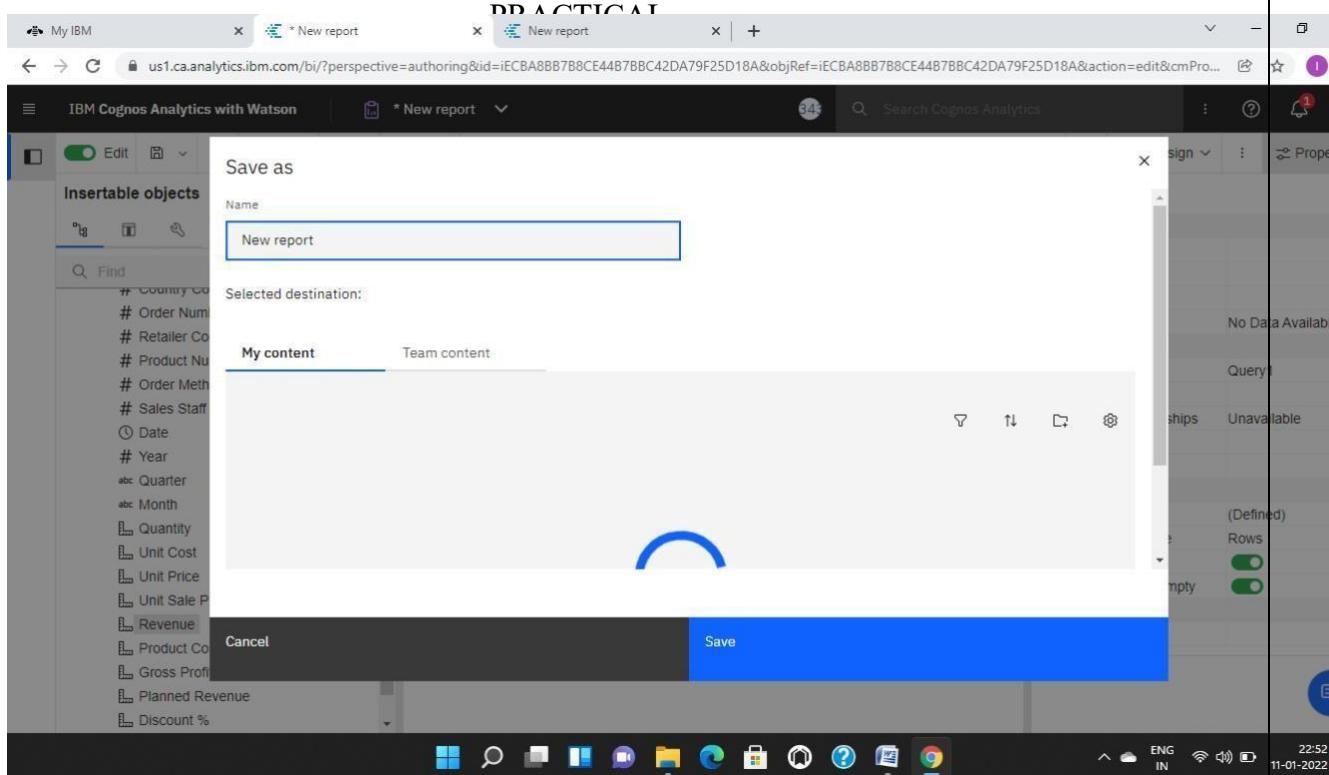
PRACTICAL

The screenshot shows the IBM Cognos Analytics with Watson interface. A report titled "Page1" is open, displaying a crosstab with two rows and three columns. The columns are labeled "<#Revenue#>" and the rows are labeled "<#Product Line#>". The properties panel on the right is expanded, showing settings for the crosstab, conditional styles, and general properties. The status bar at the bottom indicates the date as 11-01-2022 and the time as 22:51.

The screenshot shows the same IBM Cognos Analytics interface. A context menu is open over the report area, with the "Save As..." option highlighted. The properties panel on the right is visible, showing the same configuration as the previous screenshot. The status bar at the bottom indicates the date as 11-01-2022 and the time as 22:52.

4. WE WILL NOW SAVE IT .

IT WILL BE SAVED IN MY CONTENT.



Revenue	
Camping Equipment	\$1,589,036,66
Golf Equipment	\$726,411,36
Personal Accessories	\$1,485,673,30
Outdoor Protection	\$75,994,29
Mountaineering Equipment	\$409,660,13

5. NOW WE WILL GO BACK TO THE FORMAT PAGE AND RUN THE REPORT. AND IT WILL LOOK LIKE THIS:

Practical - 4

Definition: - Create a list report in IBM Cognos using the Great Outdoors data module to fetch and display data based on specific conditions. Apply various types of filters (such as detail filters with its sub types to refine the results and analyse only the required information effectively).

- **Outcomes/Learning:** - The list includes only those data records that satisfy the combined logic of your Custom, Combined, and Advanced Detail Filters.
- The final result allows you to see the exact product performance (Revenue, Quantity Sold, etc.) that meets the precise criteria you defined, such as showing only high-revenue transactions within a specific country and year range.

Required Tool: - The required tool will be “IBM Cognos Analytics”

- *>Different levels of Filters:* -

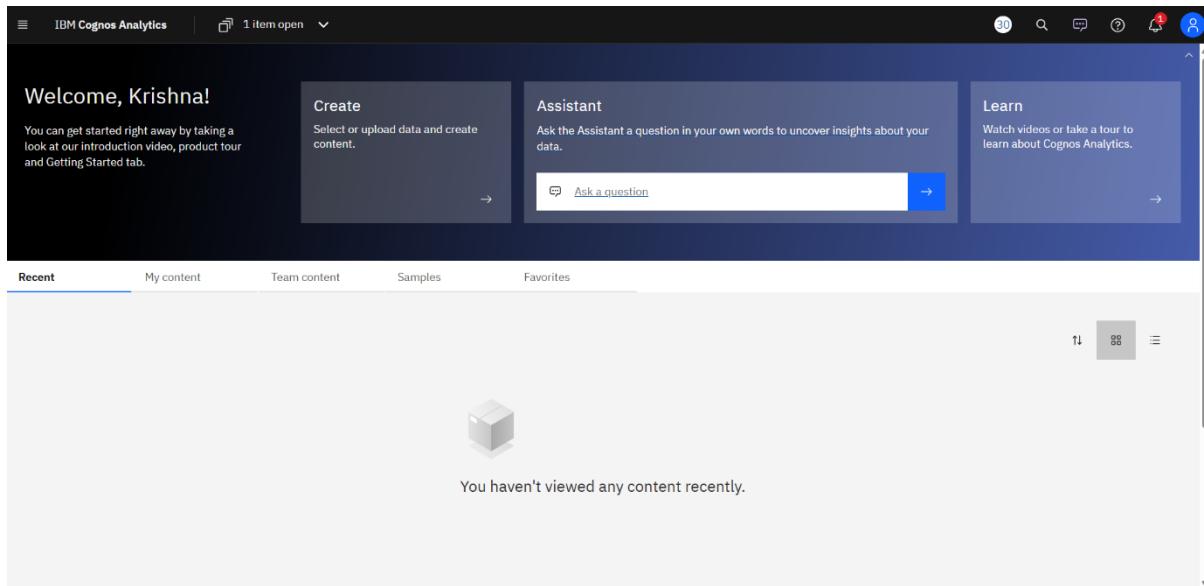
A) - custom

B) - combined

C) – Discontinuous

A) Custom Filter: -

Step 1: - IBM Cognos Analytics Tool.



Step 2: - Go to New option then select report, available on the home screen of IBM Cognos tool.

PRACTICAL

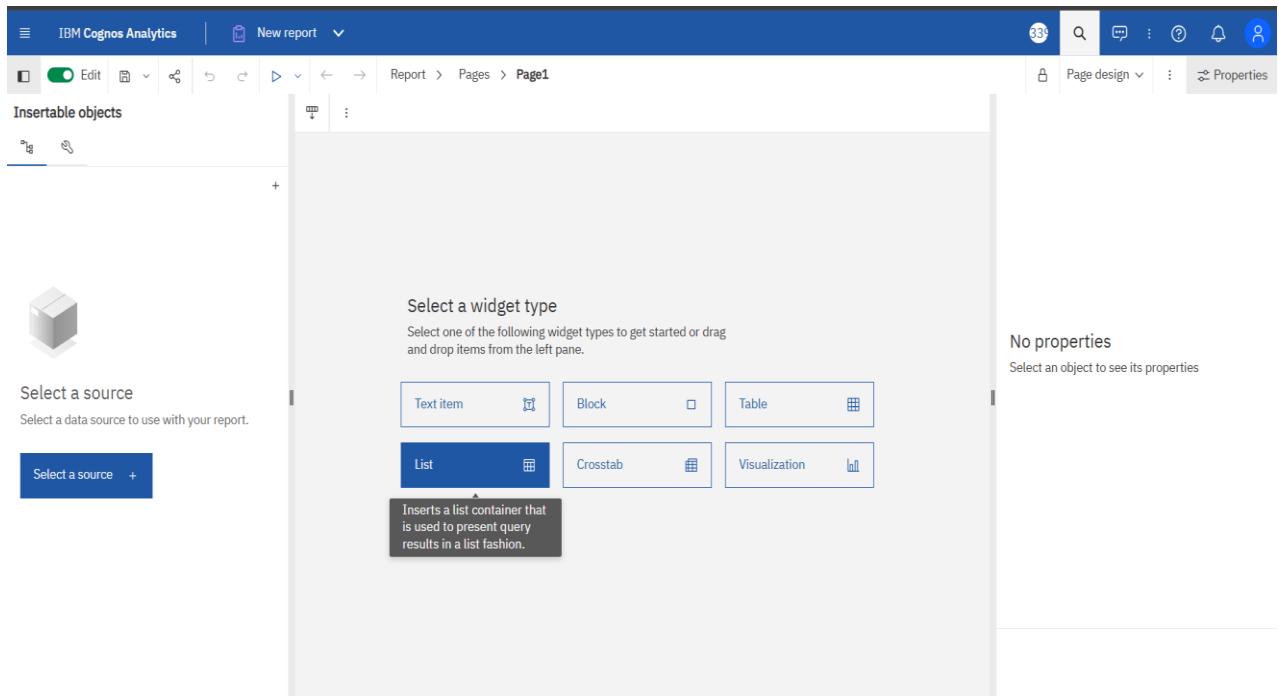
The screenshot shows the IBM Cognos Analytics home interface. On the left, a sidebar menu includes options like 'New' (Data sources, Data server, Data module, Data set, Upload data), 'Data presentation and assets' (Dashboard, Report, Assistant chat, Exploration, Story), 'Content' (Recent, Manage), and 'Report'. The main area features three main sections: 'Create' (Select or upload data and create content), 'Assistant' (Ask the Assistant a question in your own words to uncover insights about your data), and 'Learn' (Watch videos or take a tour to learn about Cognos Analytics). Below these sections, there is a grid of recent reports: 'Parametrized Prompt' (Last Accessed: 10/8/2025, 5:02 AM), 'Practical 1 - List Report' (Last Accessed: 9/30/2025, 1:24 AM), and 'My Report' (Last Accessed: 9/30/2025, 1:22 AM).

Step 3: - Select theme and templates and theme which ever you want to apply.

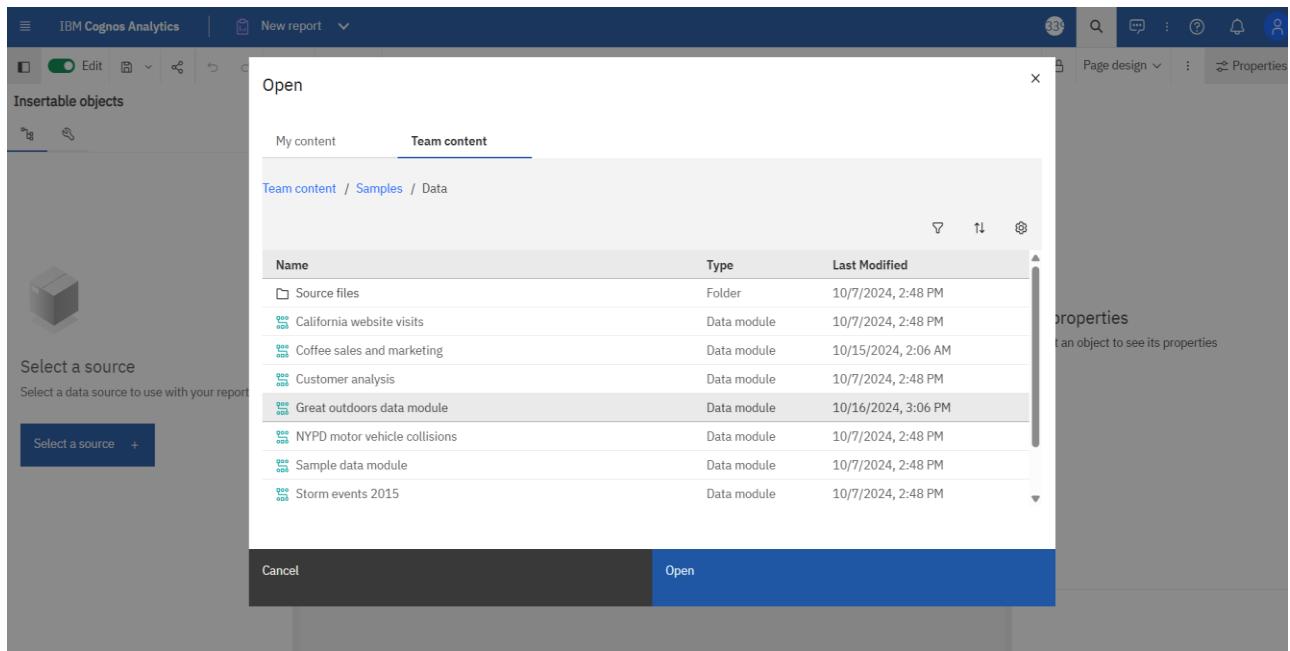
The screenshot shows the 'Create a report' dialog in IBM Cognos Analytics. The top bar includes the 'IBM Cognos Analytics' logo, a reporting dropdown, and standard toolbar icons. The main area is titled 'Create a report' and contains the sub-instruction 'Select a template and theme for your report'. Below this, there are two tabs: 'Templates' (selected) and 'Themes'. The 'Templates' tab displays a grid of 12 report layout options, each with a preview image and a name: 'Blank', 'Blank active report', '1 beside 2', '1 beside 2 active report', '1 column', '1 column active report', '2 by 2', '2 by 2 active report', '2 by 3', '2 by 3 active report', '2 column active report', and '2 columns'. To the right of the grid, there are fields labeled 'Template: Blank' and 'Theme:' with a dropdown arrow. At the bottom right of the dialog are 'Cancel' and 'Create' buttons.

Step 4: - Select the source for importing data into the report, and select the list type widget to present the data in the form of report.

PRACTICAL



Step 5: - Select a Source then select Samples < Data < Create outdoor data module



Step 6: - Selecting the relevant column such as product name, product line , country, year, quantity sold, and revenue.

PRACTICAL

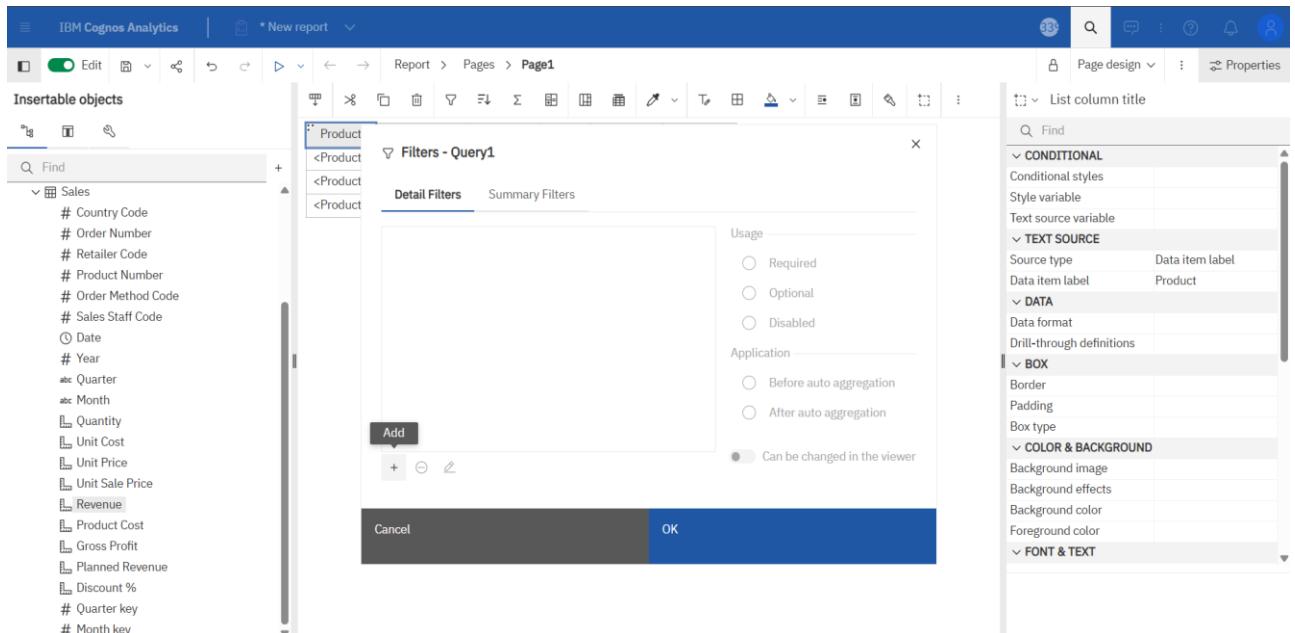
The screenshot shows the IBM Cognos Analytics interface. On the left, there's an 'Insertable objects' pane with a tree view of various data items under 'Sales'. In the center, there's a table with columns: Product, Product Line, Country, Year, Quantity, and Revenue. The table has three rows of sample data. On the right, there's a 'Properties' panel open for the table, showing settings like 'Conditional styles', 'Style variable', 'No data contents' (set to 'No Data Available'), and 'GENERAL' settings for 'Contents height' (Minimal), 'Column titles' (At start of list), and 'Pagination' (Defined). There's also a 'Highlight groups' toggle.

Step 7: - Click on funnel to apply the filter (Filters restrict data based on specified conditions. This is essential for targeted analysis.) and just after click on edit filter.

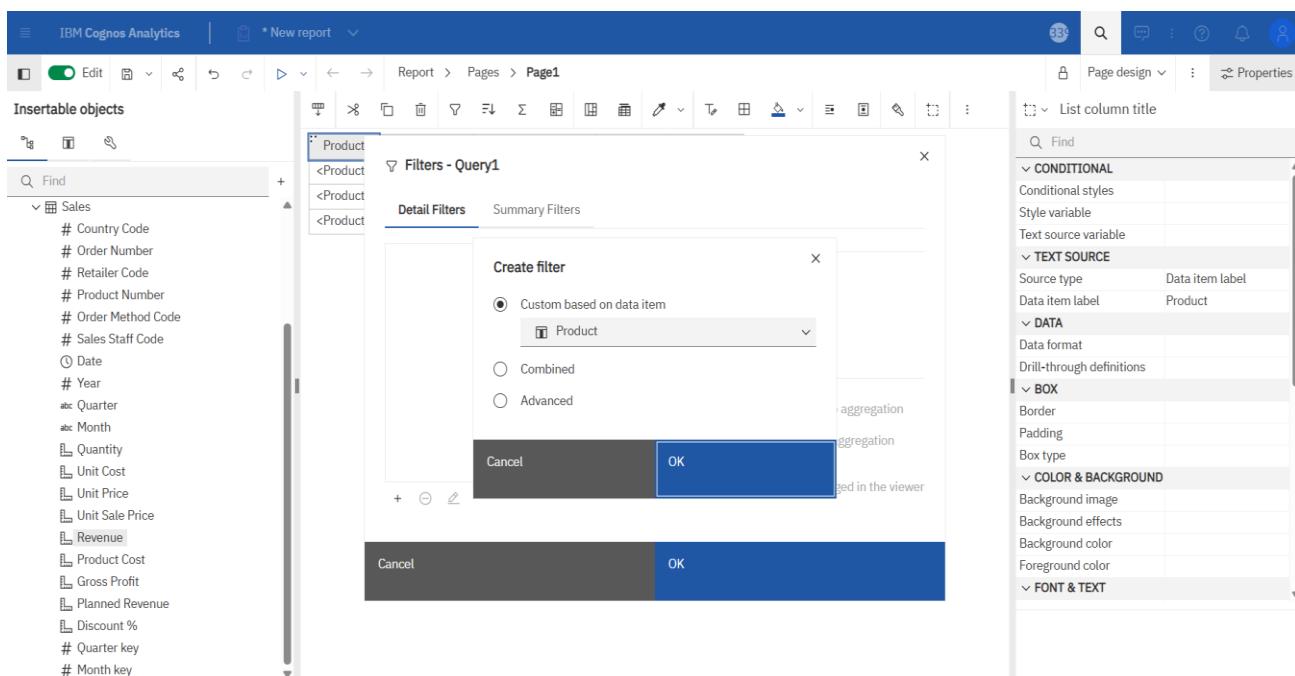
This screenshot shows the same IBM Cognos Analytics interface as above, but with a context menu open over the first cell of the table. The menu options include 'Include Null', 'Exclude Null', 'Create Custom Filter...', 'Edit Filters...', and 'Insert Filter Text'. The 'Edit Filters...' option is highlighted. The properties panel on the right is partially visible, showing 'List column title' and 'CONDITIONAL' settings.

Step 8: - Under the detail filters click on **Add Icon** to select apply the simple filter.

PRACTICAL

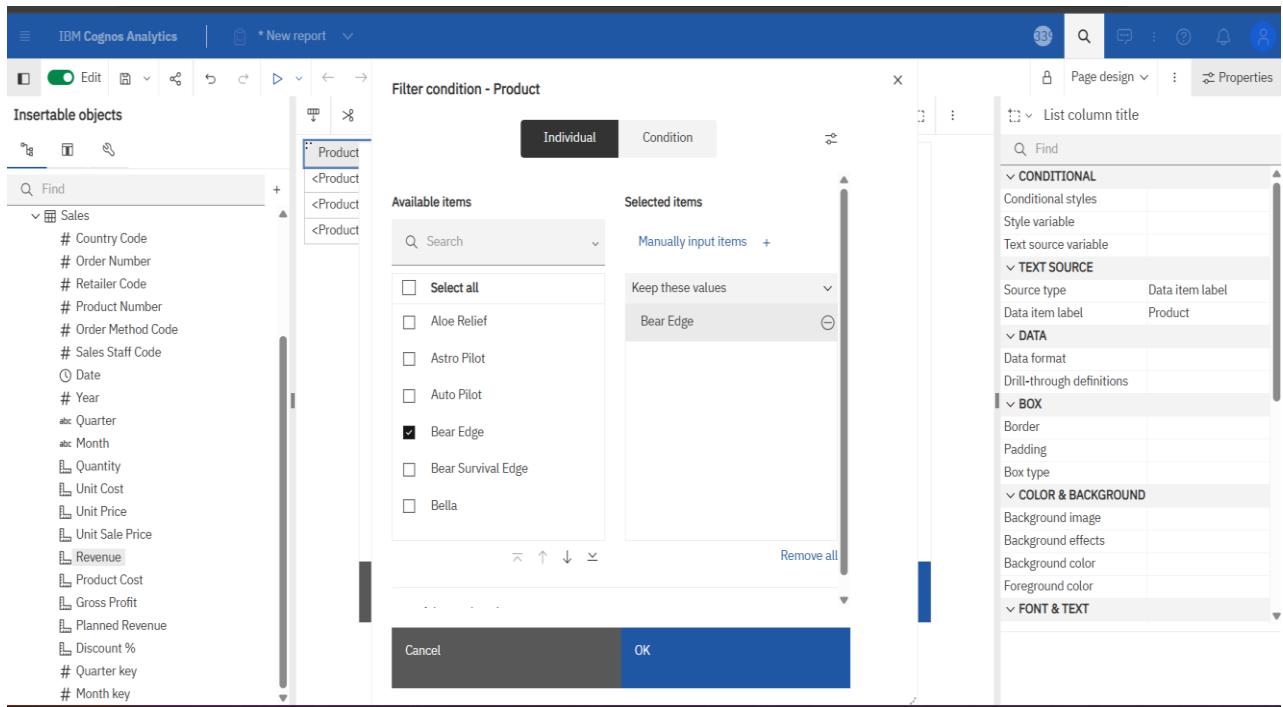


Step 9: - Create filter option pop up and then select the **custom based data items** and under it select data item have to apply simple filter and **press ok**.

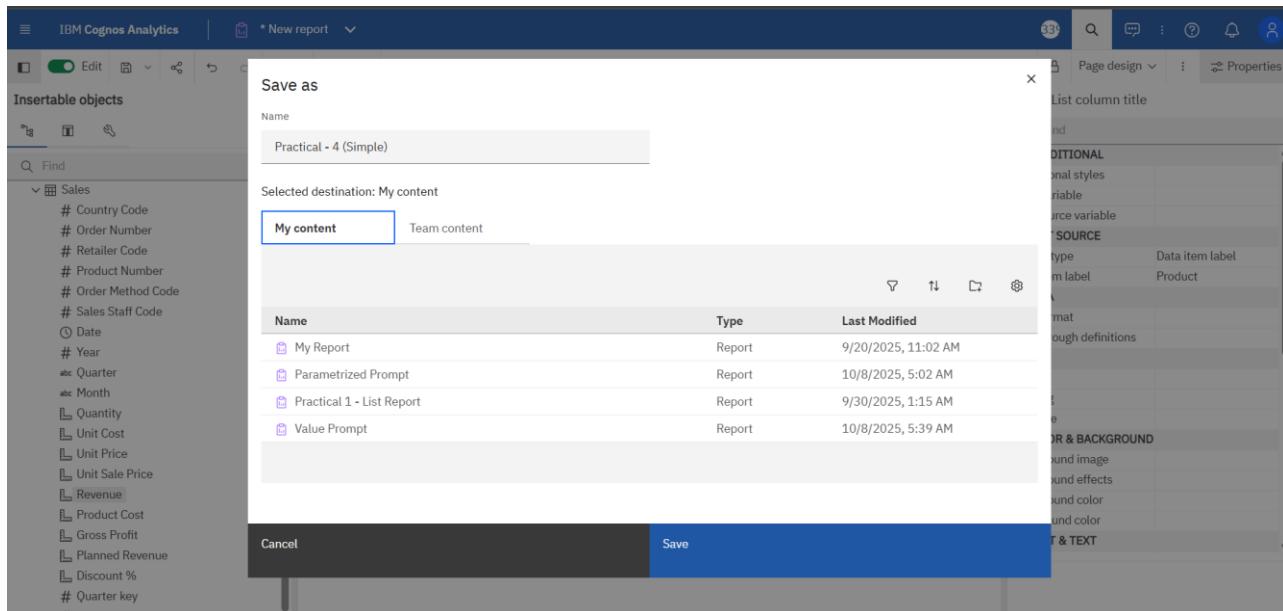


Step 9: - Under the Filter condition go to Individual option and choose the available items and click ok and then again ok.

PRACTICAL



Step 10: - Click on save as and save the report into My content.



Step 11: - Then click on RUN HTML to run the report.

PRACTICAL

The screenshot shows the IBM Cognos Analytics interface. The top navigation bar includes 'IBM Cognos Analytics', 'Practical - 4 (Simple)', and 'Report > Pages > Page1'. The toolbar has various icons for file operations like Open, Save, Print, and Export. The left sidebar is titled 'Insertable objects' and lists categories like Sales, Date, and Quantity. The main workspace contains a table with columns: Product, Product Line, Country, Year, Quantity, and Revenue. The properties panel on the right is open, showing the current selection is 'Product' under 'Data item label'. Other sections visible include 'CONDITIONAL', 'TEXT SOURCE', 'DATA', 'BOX', and 'FONT & TEXT'.

Step 12: - The final report shows where the simple filter is applied.

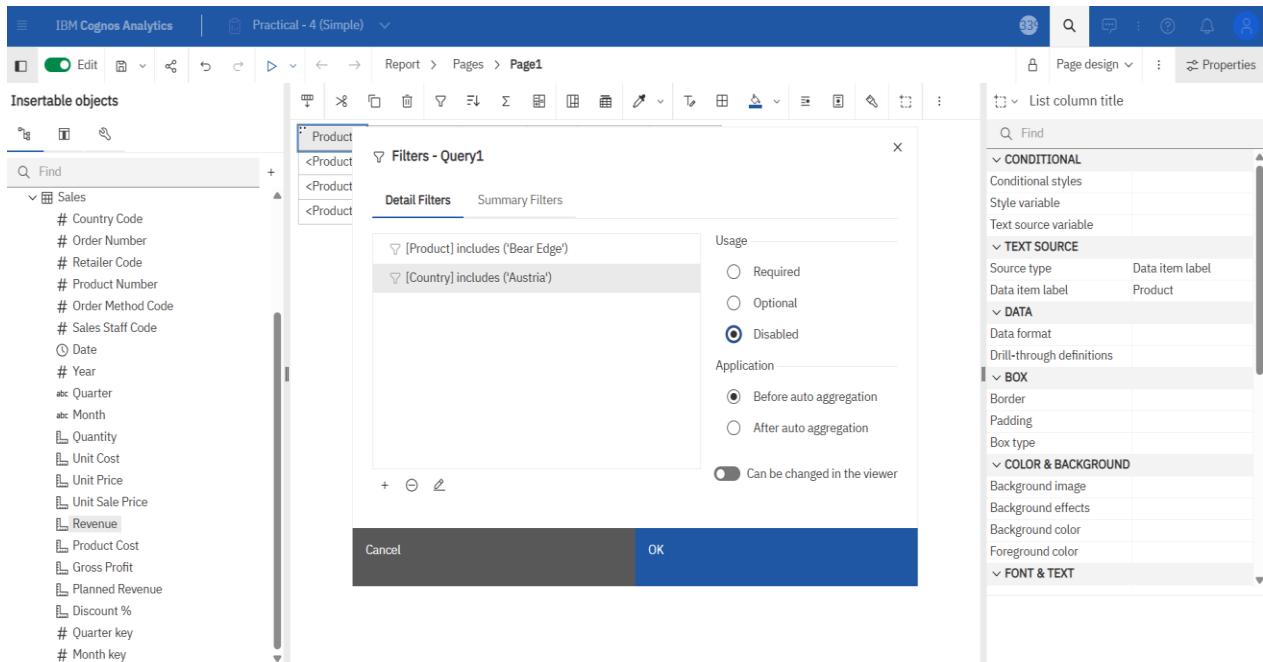
The screenshot shows the final report generated by IBM Cognos Analytics. The title bar says 'New report'. The main content is a table with columns: Product, Product Line, Country, Year, Quantity, and Revenue. The data is filtered to show sales for 'Bear Edge' products. The bottom of the page has navigation links: Top, Page up, Page down, Bottom.

Product	Product Line	Country	Year	Quantity	Revenue
Bear Edge	Personal Accessories	Mexico	2015	3,906	\$151,943.40
Bear Edge	Personal Accessories	Brazil	2016	2,028	\$79,700.40
Bear Edge	Personal Accessories	Japan	2016	7,436	\$292,234.80
Bear Edge	Personal Accessories	Singapore	2015	5,095	\$198,195.50
Bear Edge	Personal Accessories	Korea	2016	4,912	\$192,837.20
Bear Edge	Personal Accessories	Korea	2018	8,708	\$343,199.79
Bear Edge	Personal Accessories	China	2015	6,652	\$256,228.59
Bear Edge	Personal Accessories	Netherlands	2016	10,724	\$421,453.20
Bear Edge	Personal Accessories	Netherlands	2018	12,271	\$486,225.66
Bear Edge	Personal Accessories	Denmark	2016	2,957	\$116,210.10
Bear Edge	Personal Accessories	Finland	2015	6,460	\$251,294.00
Bear Edge	Personal Accessories	Finland	2016	6,745	\$265,078.50
Bear Edge	Personal Accessories	Finland	2018	10,764	\$423,406.91
Bear Edge	Personal Accessories	France	2015	12,771	\$496,791.90
Bear Edge	Personal Accessories	France	2018	12,172	\$482,220.16
Bear Edge	Personal Accessories	Denmark	2018	373	\$14,811.83
Bear Edge	Personal Accessories	United States	2015	45,160	\$1,746,940.58
Bear Edge	Personal Accessories	United States	2017	62,736	\$2,476,112.86
Bear Edge	Personal Accessories	Canada	2015	10,644	\$414,051.60
Bear Edge	Personal Accessories	Mexico	2017	11,102	\$562,564.22

B) Combined Filter: -

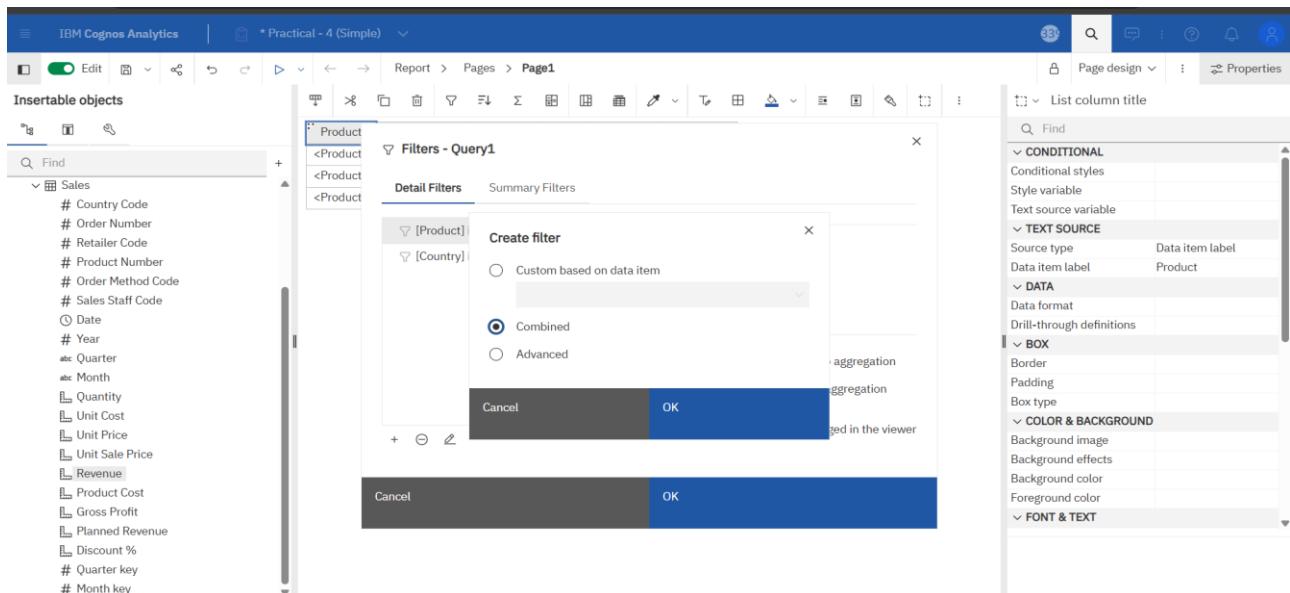
To create combined filter, report all steps are same as custom up to the edit filter after that disable the previous filter is the step 1.

PRACTICAL



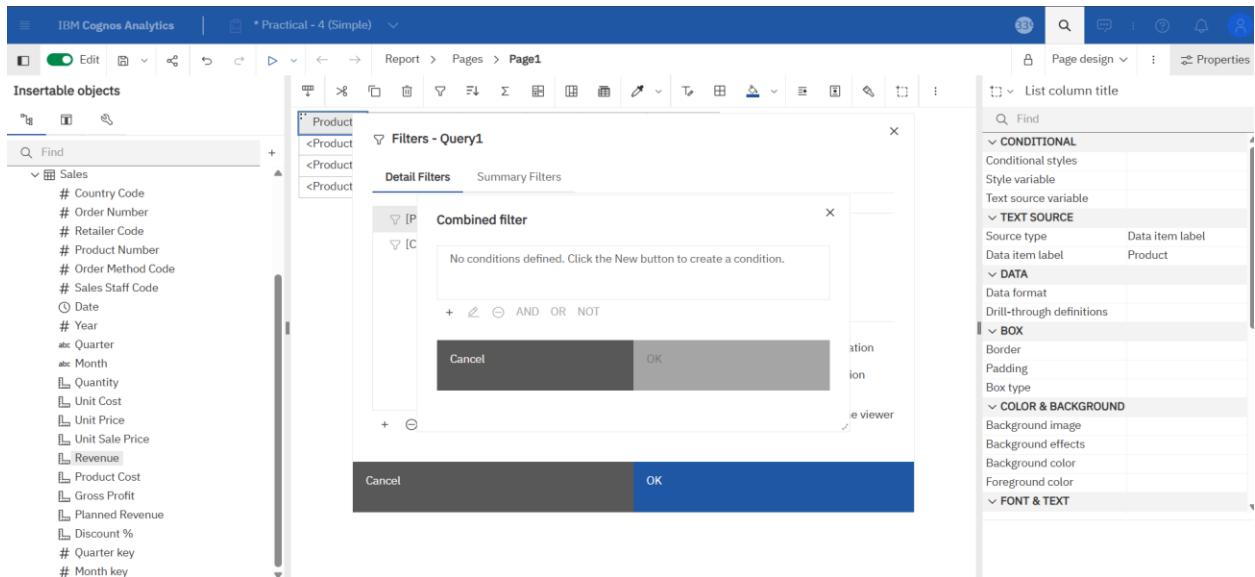
Step 02: - Combined filter

To create combined filter, report all steps are same as custom upto the edit filter after that disable the previous filter is the

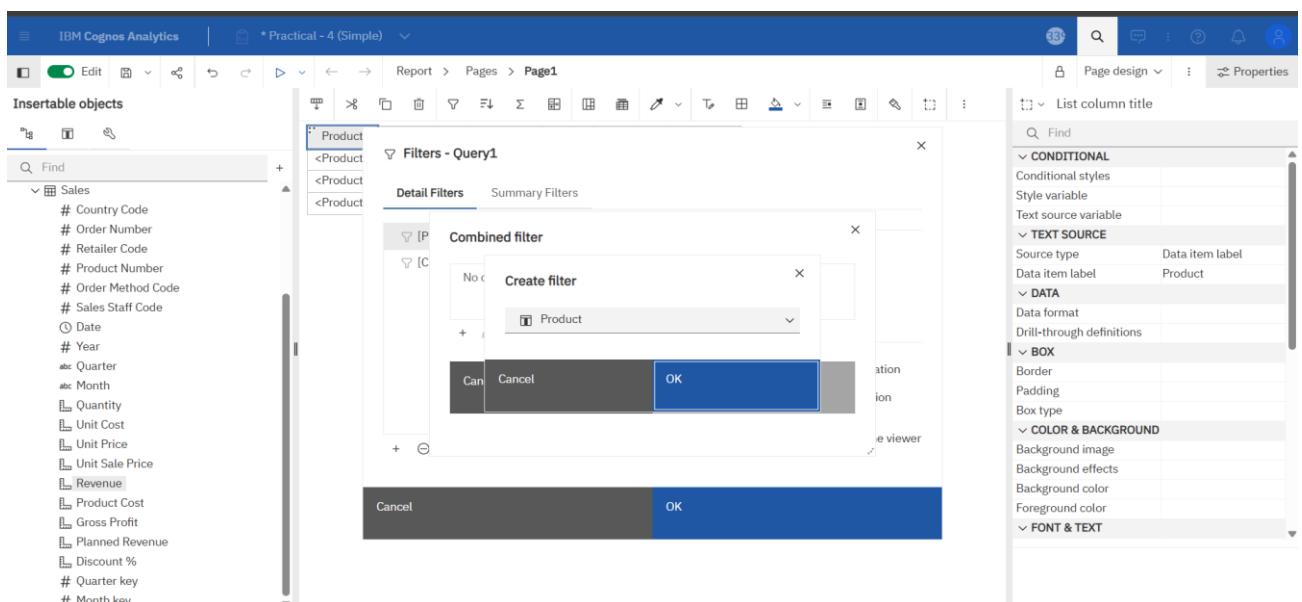


Step 3: - In Combined filter select the New Condition then click ok.

PRACTICAL

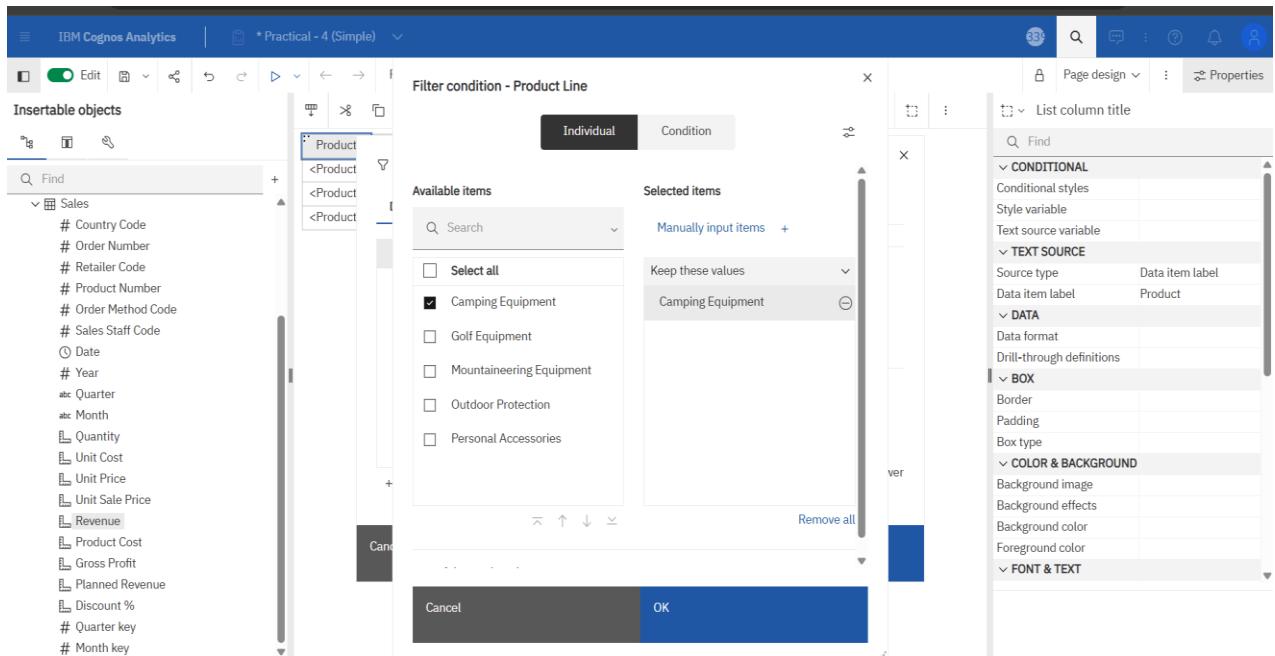


Step 4: - It generates Create filter then select the data items. In condition one and press ok

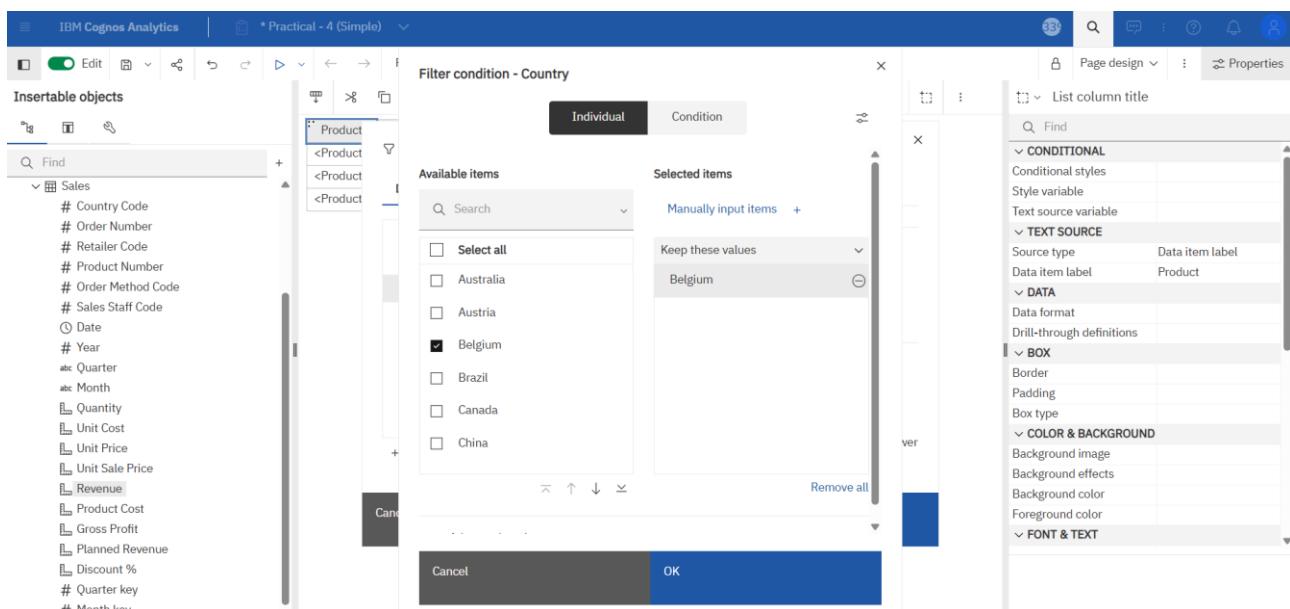


Step 5: - Then select the available item for filter.

PRACTICAL



Step 6: - Give the second condition accordingly, and click ok and then ok again.



Step 7: - Save the report and Run HTML.

PRACTICAL

The screenshot shows a report in IBM Cognos Analytics. At the top, there's a toolbar with various icons and a search bar. Below the toolbar is a table titled 'Product' with columns: Product, Product Line, Country, Year, Quantity, and Revenue. The table contains numerous rows of data, such as 'Canyon Mule Carryall' with 2,440 units sold in Belgium in 2015 for \$167,372.85. At the bottom of the table, there are navigation links for 'Top', 'Page up', 'Page down', and 'Bottom'.

Product	Product Line	Country	Year	Quantity	Revenue
Canyon Mule Carryall	Camping Equipment	Belgium	2015	2,440	\$167,372.85
Canyon Mule Carryall	Camping Equipment	Belgium	2016	3,719	\$256,945.71
Canyon Mule Carryall	Camping Equipment	Belgium	2017	5,516	\$385,182.28
Canyon Mule Carryall	Camping Equipment	Belgium	2018	3,791	\$264,725.53
Canyon Mule Climber Backpack	Camping Equipment	Belgium	2015	2,787	\$198,586.44
Canyon Mule Climber Backpack	Camping Equipment	Belgium	2016	6,795	\$493,077.79
Canyon Mule Climber Backpack	Camping Equipment	Belgium	2017	10,877	\$797,828.94
Canyon Mule Climber Backpack	Camping Equipment	Belgium	2018	11,738	\$857,899.80
Canyon Mule Cooler	Camping Equipment	Belgium	2015	4,082	\$132,991.56
Canyon Mule Cooler	Camping Equipment	Belgium	2016	7,932	\$259,647.20
Canyon Mule Cooler	Camping Equipment	Belgium	2017	15,216	\$409,122.03
Canyon Mule Cooler	Camping Equipment	Belgium	2018	12,314	\$353,894.94
Canyon Mule Extreme Backpack	Camping Equipment	Belgium	2015	452	\$195,039.10
Canyon Mule Extreme Backpack	Camping Equipment	Belgium	2016	2,544	\$1,101,272.16
Canyon Mule Extreme Backpack	Camping Equipment	Belgium	2017	3,112	\$1,379,525.00
Canyon Mule Extreme Backpack	Camping Equipment	Belgium	2018	2,668	\$1,178,968.62
Canyon Mule Journey Backpack	Camping Equipment	Belgium	2015	1,751	\$599,484.58
Canyon Mule Journey Backpack	Camping Equipment	Belgium	2016	3,998	\$1,378,724.70
Canyon Mule Journey Backpack	Camping Equipment	Belgium	2017	3,157	\$1,087,129.48
Canyon Mule Journey Backpack	Camping Equipment	Belgium	2019	3,015	\$1,263,110.76

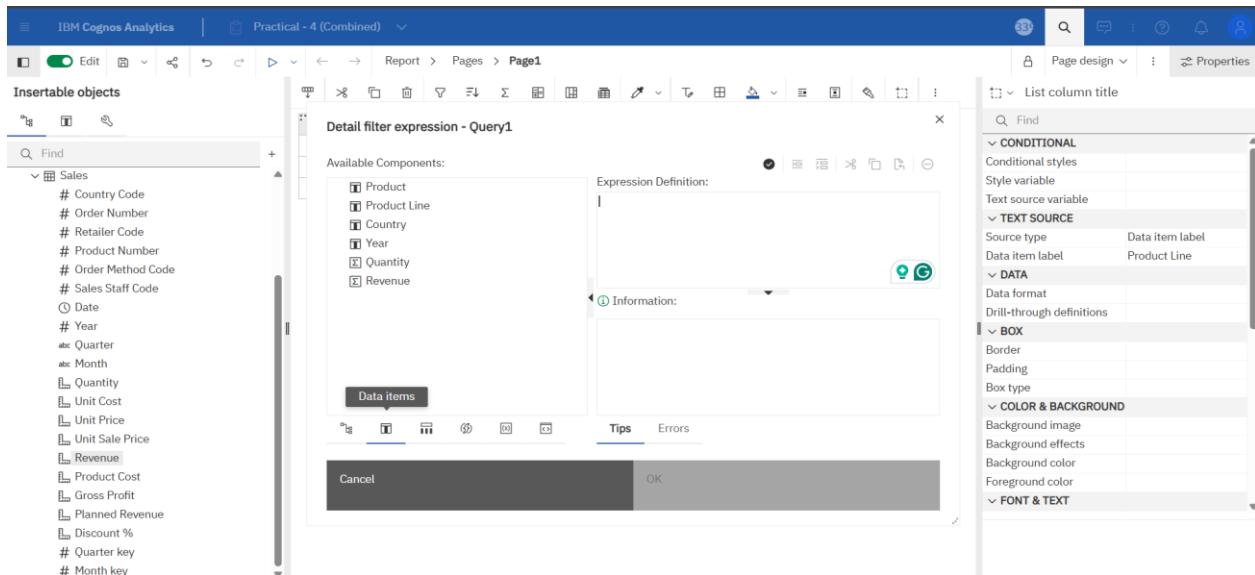
3) Advance Filter: -

Step 1: - All step is same till the filter disable and then select the **Advance filter and press ok.**

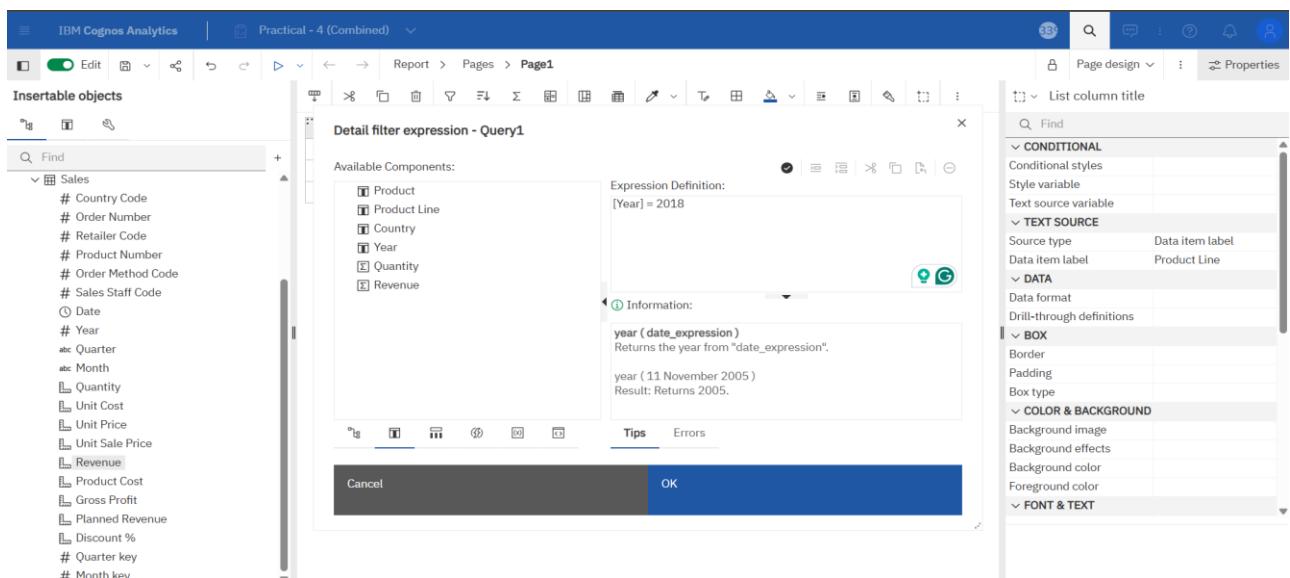
The screenshot shows the 'Create filter' dialog box in IBM Cognos Analytics. The dialog has three tabs: 'Detail Filters', 'Summary Filters', and 'Advanced'. The 'Advanced' tab is selected. Inside, there are dropdown menus for 'Product', 'Country', and 'Product Line'. Under each dropdown, there are three radio button options: 'Custom based on data item', 'Combined', and 'Advanced'. The 'Advanced' option is currently selected. At the bottom of the dialog are 'Cancel' and 'OK' buttons.

Step 2: - Go to data item.

PRACTICAL



Step 3: - Under the available components select the data items were have to apply advanced filter and double click on it after that under Expression Definition give the syntax of outcome.



Step 4: - click on save and Run HTML.

PRACTICAL

The screenshot shows the IBM Cognos Analytics interface. At the top, there's a navigation bar with icons for file, search, and user profile. Below the bar, a toolbar has buttons for back, forward, search, and filters. The main area displays a table titled "New report". The table has columns: Product, Product Line, Country, Year, Quantity, and Revenue. The data shows various camping equipment items from different brands like Canyon Mule, EverGlow, and Firefly, sold in Belgium in 2018. The total revenue for the last row is \$204,067.00.

Product	Product Line	Country	Year	Quantity	Revenue
Canyon Mule Carryall	Camping Equipment	Belgium	2018	3,791	\$264,725.53
Canyon Mule Climber Backpack	Camping Equipment	Belgium	2018	11,738	\$857,899.80
Canyon Mule Cooler	Camping Equipment	Belgium	2018	12,314	\$353,894.94
Canyon Mule Extreme Backpack	Camping Equipment	Belgium	2018	2,668	\$1,178,968.62
Canyon Mule Journey Backpack	Camping Equipment	Belgium	2018	3,915	\$1,362,419.76
Canyon Mule Weekender Backpack	Camping Equipment	Belgium	2018	2,808	\$765,953.79
EverGlow Butane	Camping Equipment	Belgium	2018	2,234	\$143,922.01
EverGlow Double	Camping Equipment	Belgium	2018	631	\$32,906.65
EverGlow Kerosene	Camping Equipment	Belgium	2018	3,738	\$117,933.90
EverGlow Lamp	Camping Equipment	Belgium	2018	15,277	\$324,732.49
EverGlow Single	Camping Equipment	Belgium	2018	6,518	\$175,813.14
Firefly 2	Camping Equipment	Belgium	2018	8,335	\$227,852.85
Firefly 4	Camping Equipment	Belgium	2018	2,538	\$74,718.72
Firefly Extreme	Camping Equipment	Belgium	2018	3,580	\$193,821.20
Firefly Lite	Camping Equipment	Belgium	2018	6,852	\$100,887.84
Firefly Mapreader	Camping Equipment	Belgium	2018	14,404	\$222,610.08
Firefly Multi-light	Camping Equipment	Belgium	2018	3,511	\$93,181.94
Flicker Lantern	Camping Equipment	Belgium	2018	2,269	\$78,093.21
Hibernator	Camping Equipment	Belgium	2018	3,465	\$491,333.45
Hibernator Camp Cot	Camping Equipment	Belgium	2018	2,052	\$204,067.00

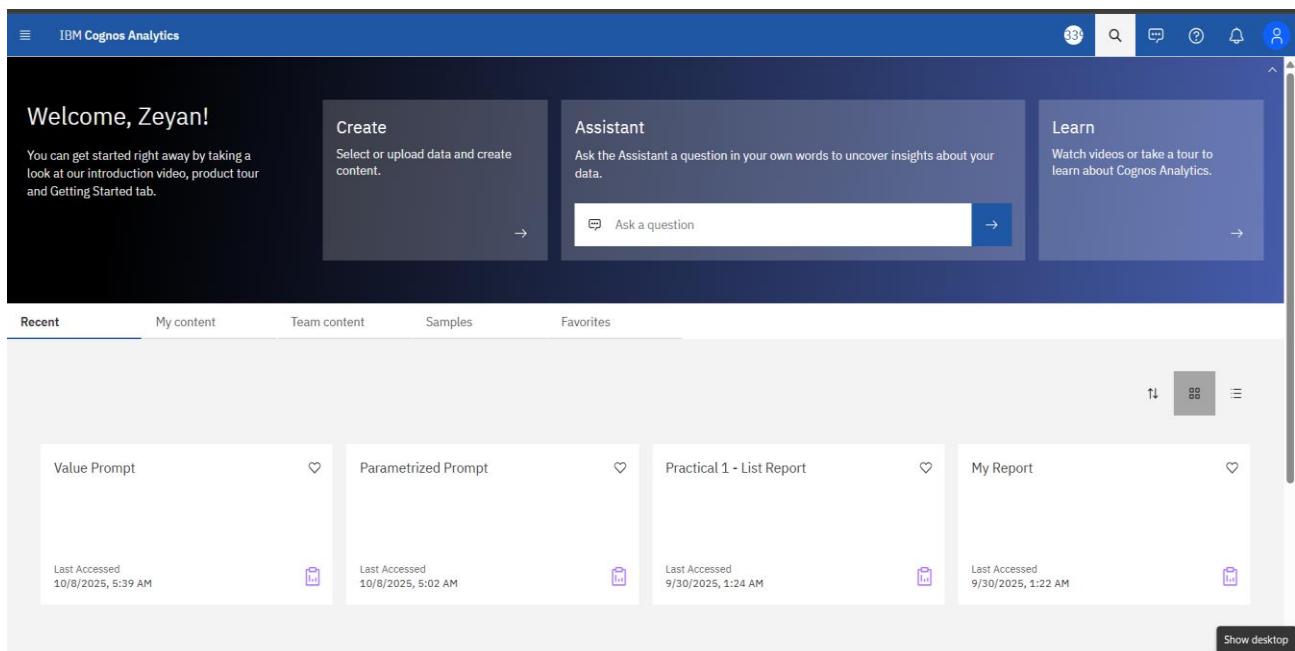
Practical -5

Definition: - Create a list report in IBM Cognos using the Great Outdoors data module to fetch and display data based on specific conditions. Apply various type of filters (like as detail filters with its sub types to refine the result and Analyse only the required information effectively)

Required Tool: - The required tool will be “IBM Cognos Analytics”

How to create a list report.

Step 1: - IBM Cognos Analytics Tool.



Step 2: - Go to New option then select report, available on the home screen of IBM Cognos tool.

PRACTICAL

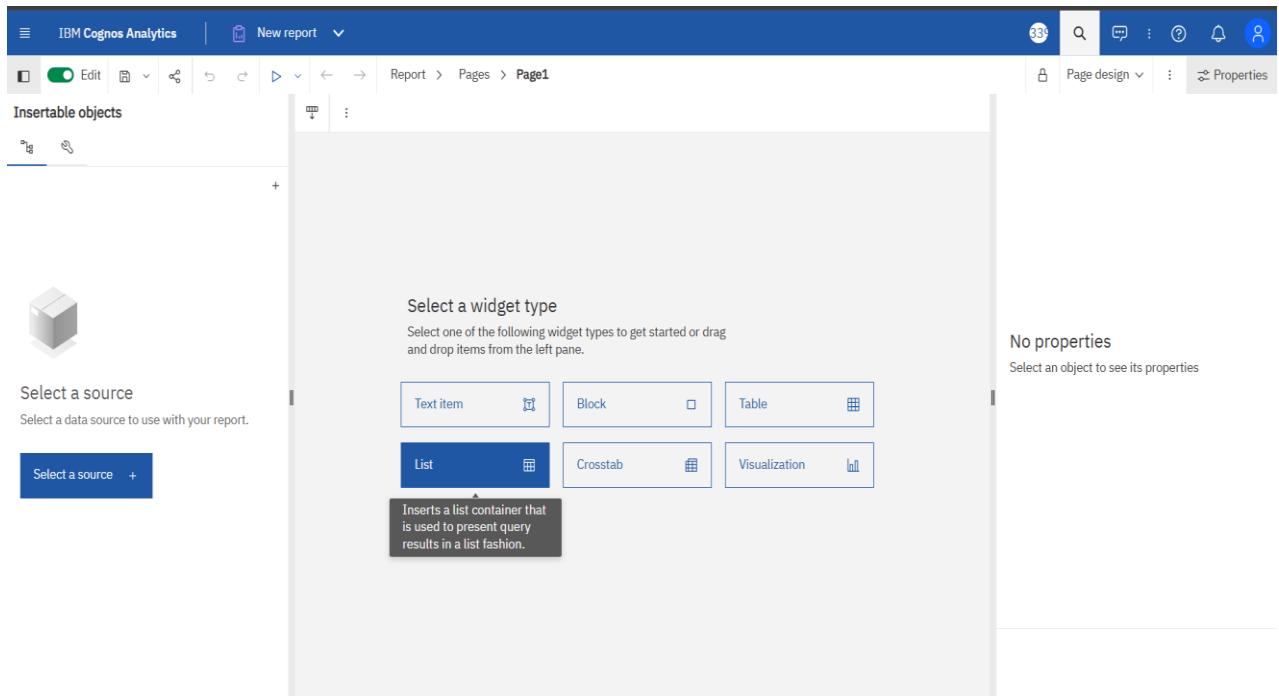
The screenshot shows the IBM Cognos Analytics home interface. On the left, a sidebar menu includes options like 'New' (Data sources, Data server, Data module, Data set, Upload data), 'Data presentation and assets' (Dashboard, Report, Assistant chat, Exploration, Story), 'Content' (Recent, Manage), and 'Report'. The main area features three main sections: 'Create' (Select or upload data and create content), 'Assistant' (Ask the Assistant a question in your own words to uncover insights about your data), and 'Learn' (Watch videos or take a tour to learn about Cognos Analytics). Below these sections, there is a grid of recent reports: 'Parametrized Prompt' (Last Accessed: 10/8/2025, 5:02 AM), 'Practical 1 - List Report' (Last Accessed: 9/30/2025, 1:24 AM), and 'My Report' (Last Accessed: 9/30/2025, 1:22 AM).

Step 3: - Select theme and templates and theme which ever you want to apply.

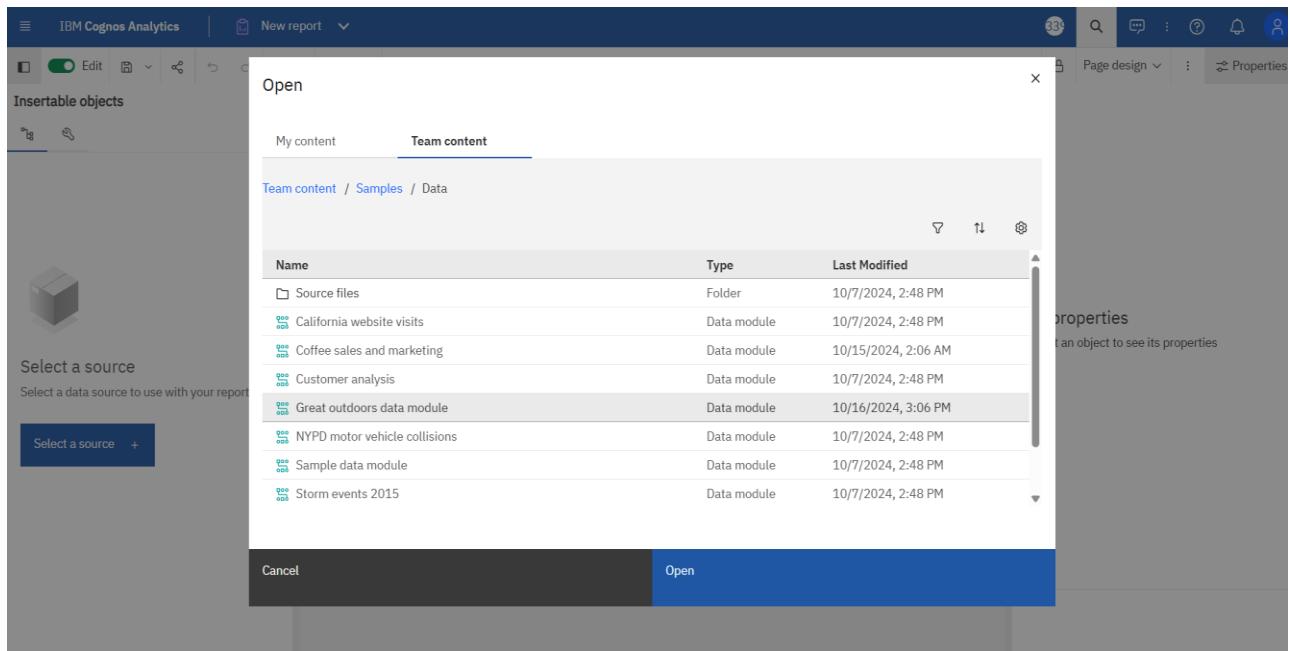
The screenshot shows the 'Create a report' dialog in IBM Cognos Analytics. At the top, it says 'Create a report' and 'Select a template and theme for your report'. There are two tabs: 'Templates' (selected) and 'Themes'. Under 'Templates', there are several options: 'Blank', 'Blank active report', '1 beside 2', '1 beside 2 active report', '1 column', '1 column active report', '2 by 2', '2 by 2 active report', '2 by 3', '2 by 3 active report', '2 column active report', and '2 columns'. To the right of the templates, it says 'Template: Blank' and 'Theme:'. At the bottom right of the dialog are 'Cancel' and 'Create' buttons.

Step 4: - Select the source for importing data into the report, and select the list type widget to present the data in the form of report.

PRACTICAL



Step 5: - Select a Source then select Samples < Data < Create outdoor data module



Step 6: - Selecting the relevant column such as product name, product line , country, year, quantity sold, and revenue.

PRACTICAL

The screenshot shows the IBM Cognos Analytics interface. On the left, there's an 'Insertable objects' pane with a tree view of various data items under 'Sales'. In the center, there's a table with columns: Product, Product Line, Country, Year, Quantity, and Revenue. The 'Year' column is currently selected. On the right, there's a 'Properties' panel with sections for Conditional, Data, General, and Font & Text.

Step 7: - Select on the Year column and click on the Filters and click on the Edit Filters option.

This screenshot is similar to the previous one, but the context menu for the 'Year' column is open. The 'Edit Filters...' option is highlighted in the menu.

Step 8: - In these slides we can click the + button and in Create filter choose the option Year in the Custom based on data item and click ok.

PRACTICAL

The screenshot shows the IBM Cognos Analytics interface with the 'Filters - Query1' dialog box open. The 'Year' filter is selected. The 'Usage' section has 'Required' selected. The 'Application' section has 'Before auto aggregation' selected. The 'OK' button is highlighted.

Step 9: - After that click on the Individual option and select the the year where you can apply filter and click ok.

The screenshot shows the 'Filter condition - Year' dialog box. The 'Individual' option is selected. The 'Selected items' section shows '2015' selected. The 'OK' button is highlighted.

Step 10: - After do all the steps then click the Run HTML tool.

PRACTICAL

Product	Product Line	Country	Year	Quantity	Revenue
Canyon Mule Extreme Backpack	Camping Equipment	United States	2015	13,542	\$5,799,767.76
Star Peg	Camping Equipment	United States	2015	295,438	\$575,040.80
Hibernator Extreme	Camping Equipment	United States	2015	31,614	\$7,795,380.12
Course Pro Putter	Golf Equipment	United States	2015	140,657	\$9,033,243.65
Course Pro Golf and Tee Set	Golf Equipment	United States	2015	120,685	\$1,187,415.39
TrailChef Double Flame	Camping Equipment	United States	2015	32,859	\$4,472,260.26
Seeker 50	Personal Accessories	United States	2015	23,437	\$2,923,062.64
TrailChef Cup	Camping Equipment	United States	2015	232,640	\$806,602.32
TrailChef Kettle	Camping Equipment	United States	2015	356,900	\$4,101,638.55
Hibernator Pad	Camping Equipment	United States	2015	78,473	\$2,771,034.22
Canyon Mule Weekender Backpack	Camping Equipment	United States	2015	51,643	\$13,730,840.84
EverGlow Butane	Camping Equipment	United States	2015	21,715	\$1,367,923.05
Mountain Man Digital	Personal Accessories	United States	2015	21,962	\$879,414.68
Glacier Basic	Personal Accessories	United States	2015	147,982	\$4,382,755.00
BugShield Lotion Lite	Outdoor Protection	United States	2015	156,820	\$1,058,130.85
Sun Blocker	Outdoor Protection	United States	2015	149,032	\$715,263.45
Lady Hailstorm Steel Irons	Golf Equipment	United States	2015	11,044	\$5,471,860.24
Hailstorm Titanium Woods Set	Golf Equipment	United States	2015	8,306	\$9,818,522.60
Hailstorm Steel Woods Set	Golf Equipment	United States	2015	8,330	\$8,387,317.90
Mountain Man Combination	Personal Accessories	United States	2015	7,815	\$720,544.75

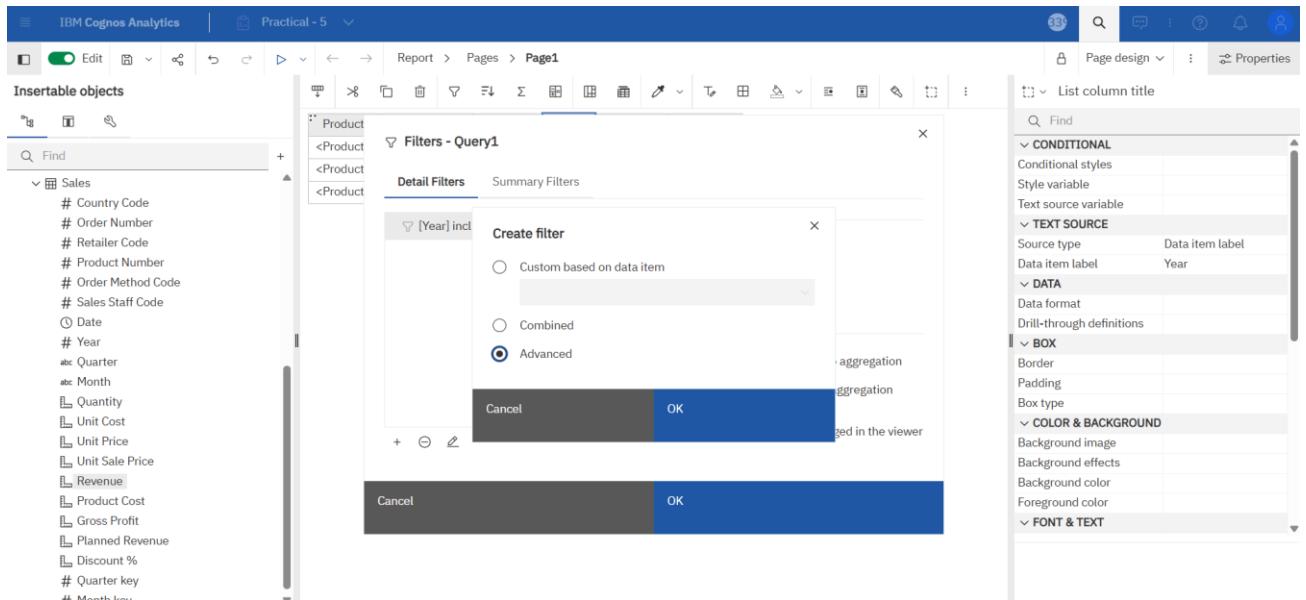
Top ▲ Page up ▾ Page down ▾ Bottom

Step 11: - After running the data disabled the filter.

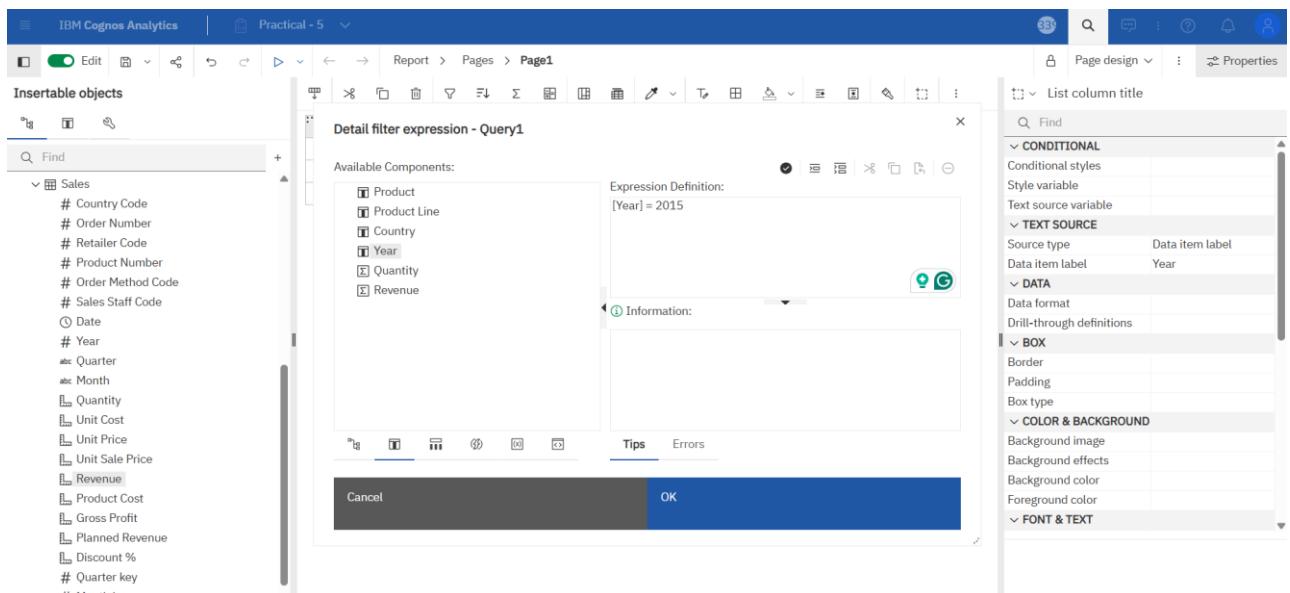
The screenshot shows the 'Filters - Query1' dialog box in the IBM Cognos Analytics interface. The 'Usage' section has the radio button for 'Disabled' selected. The 'Application' section has the radio button for 'Before auto aggregation' selected. The 'OK' button is highlighted in blue at the bottom right of the dialog.

Step 12: - We can apply the Advanced filter in the Create filter page.

PRACTICAL



Step 13: - In this Available Components we can select any data item and perform expression.



Step 14: - After applying the Year column click on the ok button and the Run the data.

PRACTICAL

The screenshot shows the 'Filters - Query1' dialog box in IBM Cognos Analytics. It contains two filters: '[Year] includes ('2015')' and '[Year] = 2015'. The 'Usage' section has 'Required' selected. The 'Application' section has 'Before auto aggregation' selected. The right side of the interface shows the 'Properties' panel with sections for Conditional styles, Text source variable, TEXT SOURCE (Source type: Data item label, Data item label: Year), DATA (Data format: Drill-through definitions), and BOX (Border, Padding, Box type). The 'COLOR & BACKGROUND' and 'FONT & TEXT' sections are also visible.

Step 15: - Display the Result after applying the Filter.

The screenshot shows the results of the filtered query. The table has columns: Product, Product Line, Country, Year, Quantity, and Revenue. The data shows sales for various products across different categories and countries in 2015. The bottom of the table has navigation links: Top, Page up, Page down, and Bottom.

Product	Product Line	Country	Year	Quantity	Revenue
Canyon Mule Extreme Backpack	Camping Equipment	United States	2015	13,542	\$5,799,767.76
Star Peg	Camping Equipment	United States	2015	295,438	\$575,040.80
Hibernator Extreme	Camping Equipment	United States	2015	31,614	\$7,795,380.12
Course Pro Putter	Golf Equipment	United States	2015	140,657	\$9,033,243.65
Course Pro Golf and Tee Set	Golf Equipment	United States	2015	120,685	\$1,187,415.39
TrailChef Double Flame	Camping Equipment	United States	2015	32,859	\$4,472,260.26
Seeker 50	Personal Accessories	United States	2015	23,437	\$2,923,062.64
TrailChef Cup	Camping Equipment	United States	2015	232,640	\$806,602.32
TrailChef Kettle	Camping Equipment	United States	2015	356,900	\$4,101,638.55
Hibernator Pad	Camping Equipment	United States	2015	78,473	\$2,771,034.22
Canyon Mule Weekender Backpack	Camping Equipment	United States	2015	51,643	\$13,730,840.84
EverGlow Butane	Camping Equipment	United States	2015	21,715	\$1,367,923.05
Mountain Man Digital	Personal Accessories	United States	2015	21,962	\$879,414.68
Glacier Basic	Personal Accessories	United States	2015	147,982	\$4,382,755.00
BugShield Lotion Lite	Outdoor Protection	United States	2015	156,820	\$1,058,130.85
Sun Blocker	Outdoor Protection	United States	2015	149,032	\$715,263.45
Lady Hailstorm Steel Irons	Golf Equipment	United States	2015	11,044	\$5,471,860.24
Hailstorm Titanium Woods Set	Golf Equipment	United States	2015	8,306	\$9,818,522.60
Hailstorm Steel Woods Set	Golf Equipment	United States	2015	8,330	\$8,387,317.90
Mountain Man Combination	Personal Accessories	United States	2015	7,915	\$720,544.75