

## **Project Development Phase Delivery of Sprint-1**

Team ID	PNT2022TMID21750
Project Name	Retail Store Stock Inventory Analytics

### **Project Development Phase:**

#### **Sprint-1:**

- Data Collection
- Data Preparation

#### **Sprint-2:**

- Data Exploration

#### **Sprint-3:**

- Dashboard Creation

#### **Sprint-4:**

- Report Creation
- Story Creation

**TEAM ID: PNT2022TMID21750**

# Retail Store Stock Inventory Analytics

## Project Contributors

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## Sprint-1:

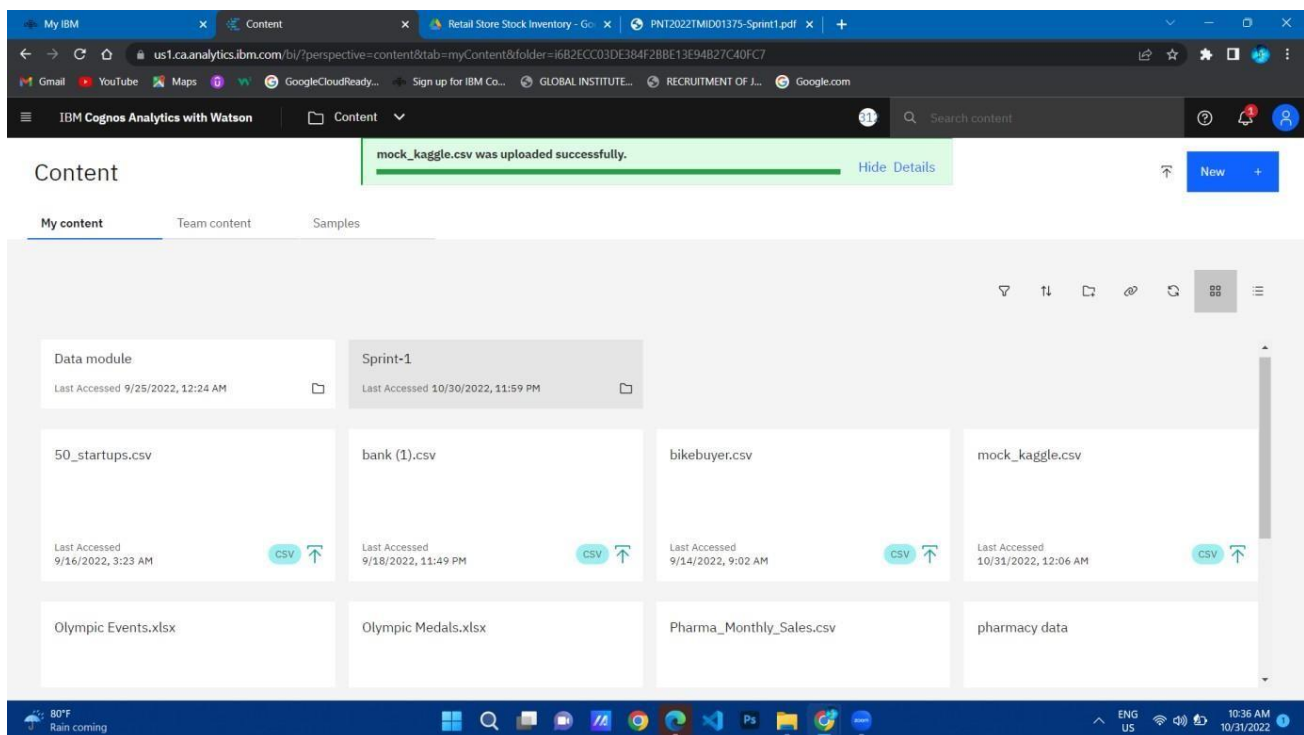
### Data Collection:

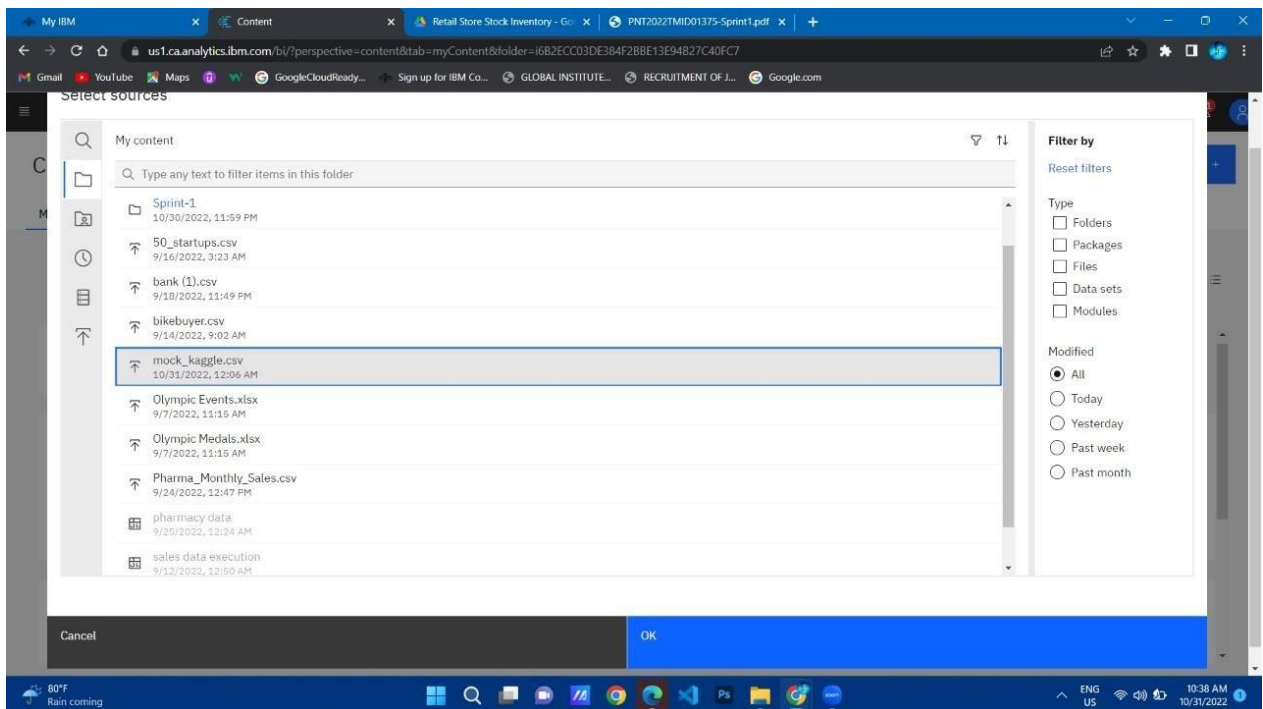
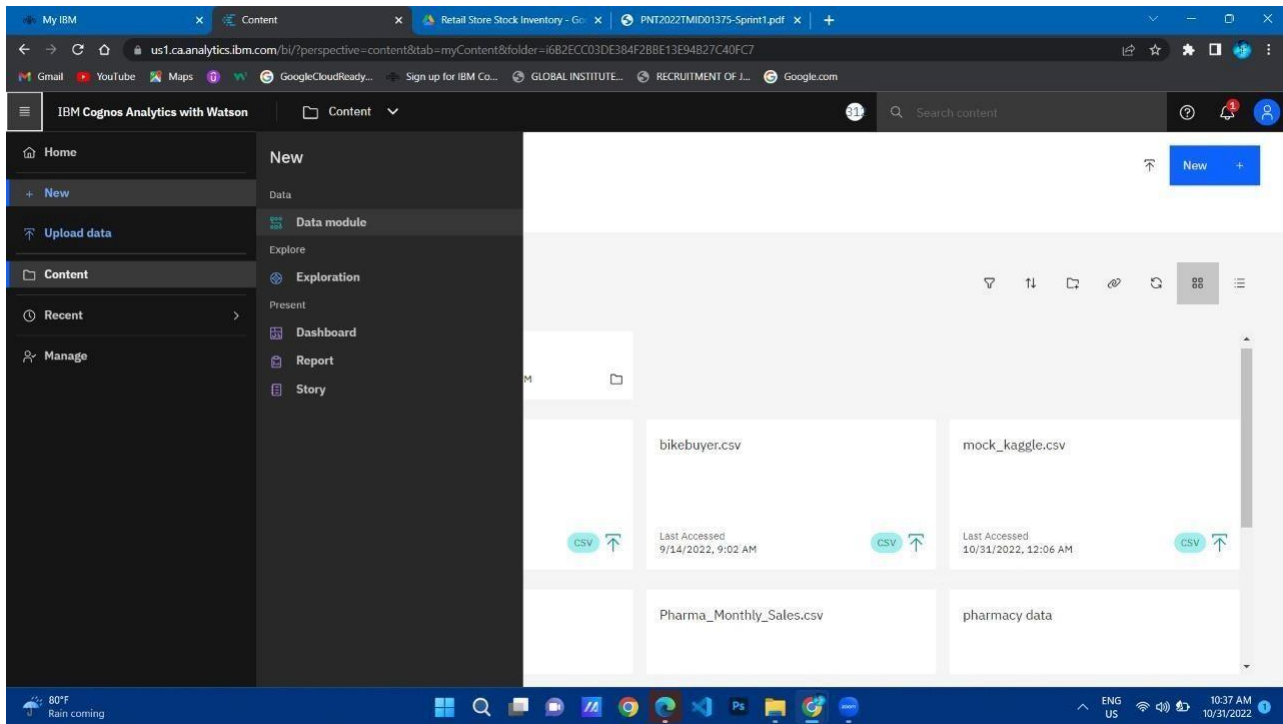
Download the Dataset

Dataset link - <https://drive.google.com/drive/folders/1kiL-5CHJmQvbk9VyFsuUs-myAupBZGNy>

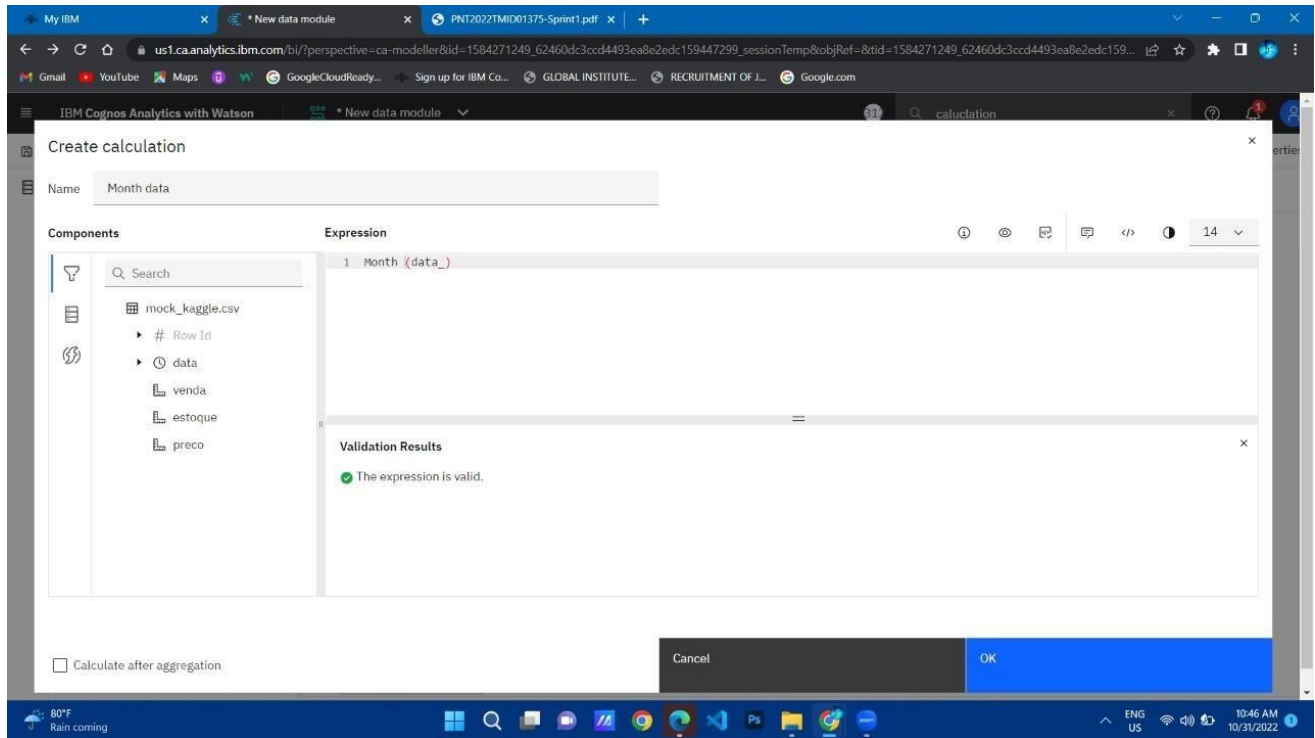
### Load the Dataset:

Tool used – IBM Cognos





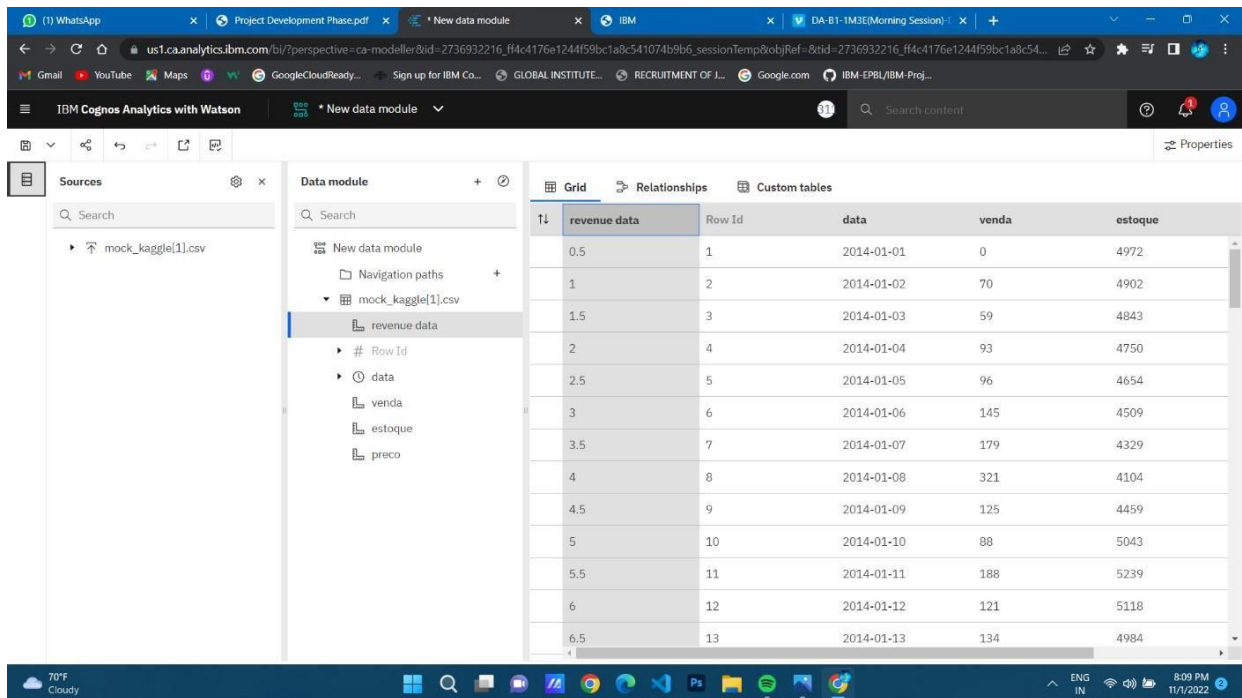
# Month data:



The screenshot shows the 'Grid' view of the 'Month data' calculation. The table displays 13 rows of data, each representing a month from January 2014. The columns are: 'Month data', 'Row Id', 'data', 'venda', 'estoque', and 'preco'.

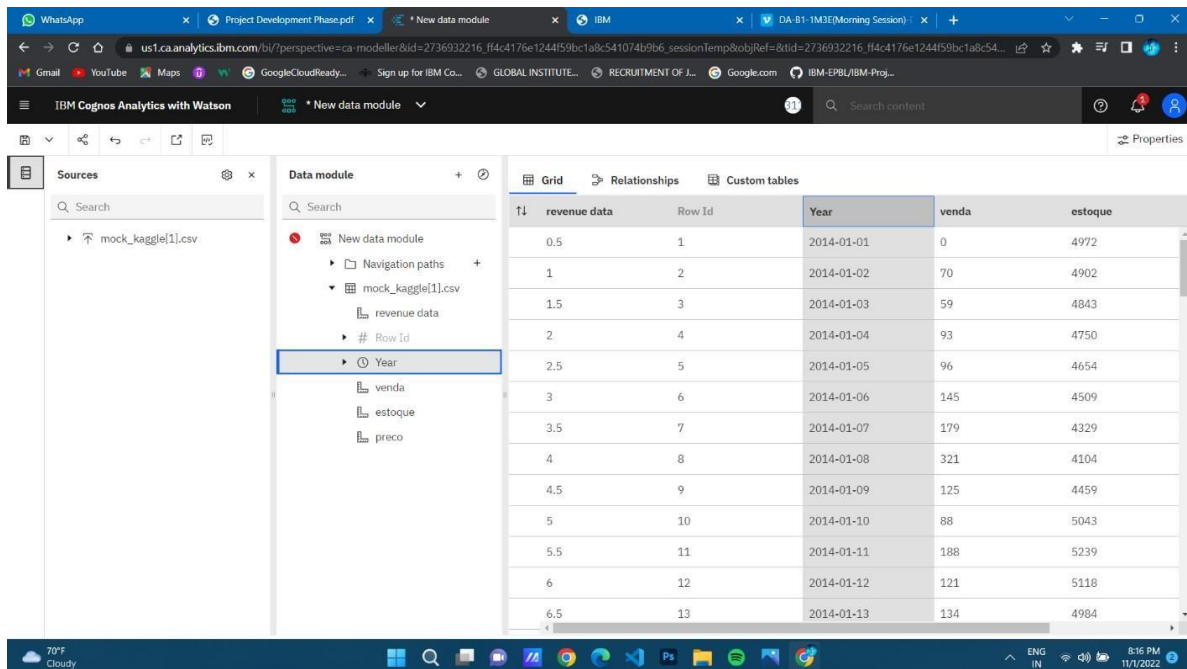
Month data	Row Id	data	venda	estoque	preco
1	1	2014-01-01	0	4972	1.29
1	2	2014-01-02	70	4902	1.29
1	3	2014-01-03	59	4843	1.29
1	4	2014-01-04	93	4750	1.29
1	5	2014-01-05	96	4654	1.29
1	6	2014-01-06	145	4509	1.29
1	7	2014-01-07	179	4329	1.29
1	8	2014-01-08	321	4104	1.29
1	9	2014-01-09	125	4459	1.09
1	10	2014-01-10	88	5043	1.09
1	11	2014-01-11	188	5239	1.09
1	12	2014-01-12	121	5118	1.09
1	13	2014-01-13	134	4984	1.09

# Revenue data:



revenue data	Row Id	data	venda	estoque
0.5	1	2014-01-01	0	4972
1	2	2014-01-02	70	4902
1.5	3	2014-01-03	59	4843
2	4	2014-01-04	93	4750
2.5	5	2014-01-05	96	4654
3	6	2014-01-06	145	4509
3.5	7	2014-01-07	179	4329
4	8	2014-01-08	321	4104
4.5	9	2014-01-09	125	4459
5	10	2014-01-10	88	5043
5.5	11	2014-01-11	188	5239
6	12	2014-01-12	121	5118
6.5	13	2014-01-13	134	4984

# Year data:



revenue data	Row Id	Year	venda	estoque
0.5	1	2014-01-01	0	4972
1	2	2014-01-02	70	4902
1.5	3	2014-01-03	59	4843
2	4	2014-01-04	93	4750
2.5	5	2014-01-05	96	4654
3	6	2014-01-06	145	4509
3.5	7	2014-01-07	179	4329
4	8	2014-01-08	321	4104
4.5	9	2014-01-09	125	4459
5	10	2014-01-10	88	5043
5.5	11	2014-01-11	188	5239
6	12	2014-01-12	121	5118
6.5	13	2014-01-13	134	4984

# Stock data:

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Sources' pane lists 'mock\_kaggle[1].csv'. The 'Data module' pane shows a tree structure with 'New data module' at the top, followed by 'Navigation paths', 'mock\_kaggle[1].csv', 'revenue data', '# Row Id', 'Year', 'Sales', 'stock' (highlighted), and 'preco'. The main 'Grid' pane displays a table with the following data:

venue data	Row Id	Year	Sales	stock
5	1	2014-01-01	0	4972
	2	2014-01-02	70	4902
5	3	2014-01-03	59	4843
	4	2014-01-04	93	4750
5	5	2014-01-05	96	4654
	6	2014-01-06	145	4509
5	7	2014-01-07	179	4329
	8	2014-01-08	321	4104
5	9	2014-01-09	125	4459
	10	2014-01-10	88	5043
5	11	2014-01-11	188	5239
	12	2014-01-12	121	5118
5	13	2014-01-13	134	4984

# Sales data:

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Sources' pane lists 'mock\_kaggle[1].csv'. The 'Data module' pane shows a tree structure with 'New data module' at the top, followed by 'Navigation paths', 'mock\_kaggle[1].csv', 'revenue data', '# Row Id', 'Year', 'Sales' (highlighted), 'estoque', and 'preco'. The main 'Grid' pane displays a table with the following data:

revenue data	Row Id	Year	Sales	estoque
0.5	1	2014-01-01	0	4972
1	2	2014-01-02	70	4902
1.5	3	2014-01-03	59	4843
2	4	2014-01-04	93	4750
2.5	5	2014-01-05	96	4654
3	6	2014-01-06	145	4509
3.5	7	2014-01-07	179	4329
4	8	2014-01-08	321	4104
4.5	9	2014-01-09	125	4459
5	10	2014-01-10	88	5043
5.5	11	2014-01-11	188	5239
6	12	2014-01-12	121	5118
6.5	13	2014-01-13	134	4984

# Price data:

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Sources' pane lists 'mock\_kaggle[1].csv'. The 'Data module' pane shows a tree structure with 'price' selected. The main 'Grid' view displays a table with columns: Row Id, Year, Sales, stock, and price. The data represents daily sales and stock prices for January 2014.

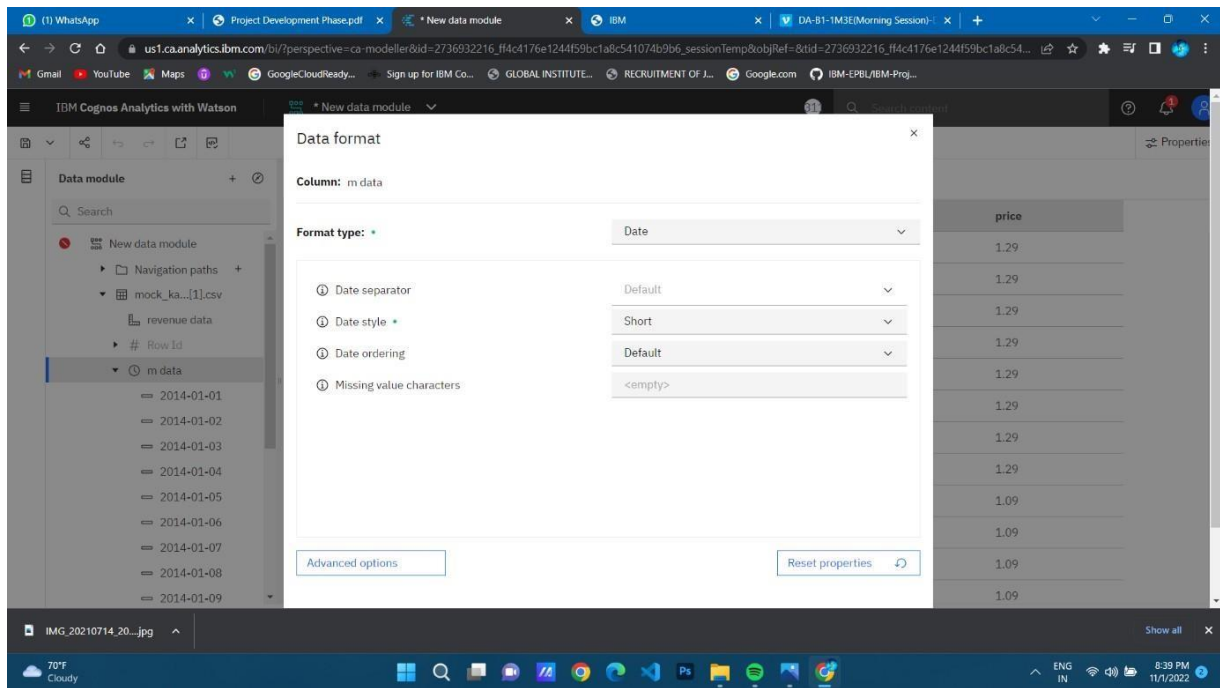
Row Id	Year	Sales	stock	price
0	2014-01-01	0	4972	1.29
70	2014-01-02	70	4902	1.29
59	2014-01-03	59	4843	1.29
93	2014-01-04	93	4750	1.29
96	2014-01-05	96	4654	1.29
145	2014-01-06	145	4509	1.29
179	2014-01-07	179	4329	1.29
321	2014-01-08	321	4104	1.29
125	2014-01-09	125	4459	1.09
88	2014-01-10	88	5043	1.09
188	2014-01-11	188	5239	1.09
121	2014-01-12	121	5118	1.09
134	2014-01-13	134	4984	1.09

# Month-Format Data:

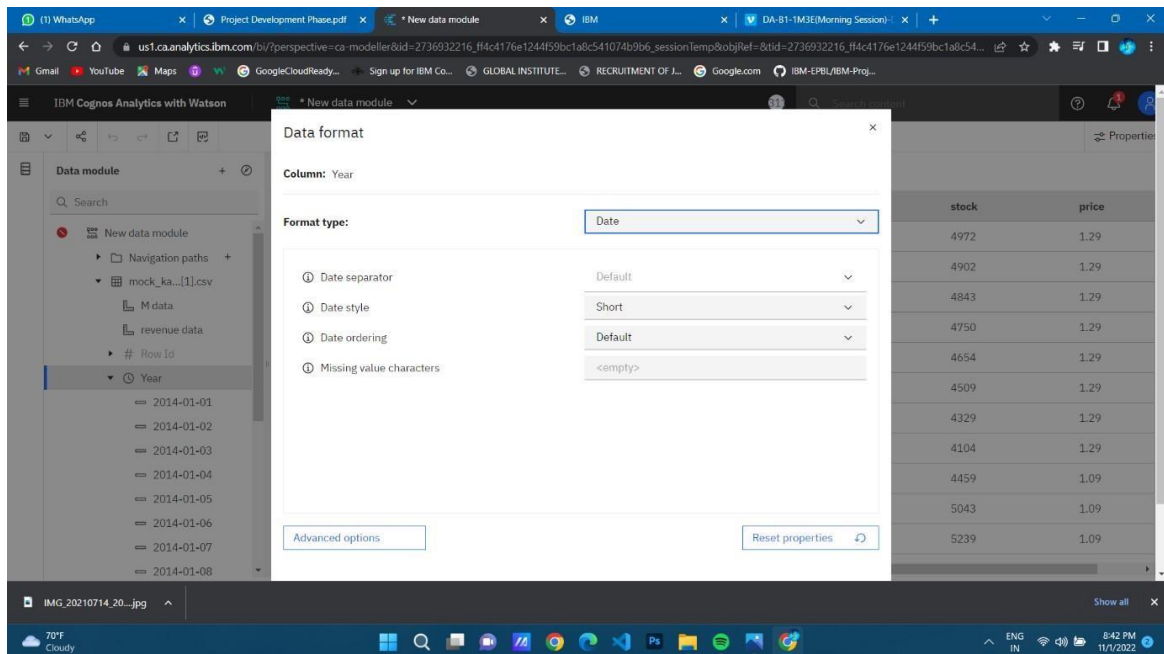
The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane shows a tree structure with 'm data' selected. The main 'Grid' view displays a table with columns: revenue data, Row Id, m data, Sales, stock, and price. The data represents monthly sales and stock prices for January 2014.

revenue data	Row Id	m data	Sales	stock	price
0.5	1	1/1/14	0	4972	1.29
1	2	1/2/14	70	4902	1.29
1.5	3	1/3/14	59	4843	1.29
2	4	1/4/14	93	4750	1.29
2.5	5	1/5/14	96	4654	1.29
3	6	1/6/14	145	4509	1.29
3.5	7	1/7/14	179	4329	1.29
4	8	1/8/14	321	4104	1.29
4.5	9	1/9/14	125	4459	1.09
5	10	1/10/14	88	5043	1.09
5.5	11	1/11/14	188	5239	1.09
6	12	1/12/14	121	5118	1.09





## Year-Format Data:



The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists the hierarchy: New data module > Navigation paths > mock\_kas...[1].csv > M data > revenue data > # Row Id > Year. The main grid view displays the following data:

M data	revenue data	Row Id	Year	Sales	stock	price
0.5	0.5	1	Jan 1, 2014	0	4972	1.29
1	1	2	Jan 2, 2014	70	4902	1.29
1.5	1.5	3	Jan 3, 2014	59	4843	1.29
2	2	4	Jan 4, 2014	93	4750	1.29
2.5	2.5	5	Jan 5, 2014	96	4654	1.29
3	3	6	Jan 6, 2014	145	4509	1.29
3.5	3.5	7	Jan 7, 2014	179	4329	1.29
4	4	8	Jan 8, 2014	321	4104	1.29
4.5	4.5	9	Jan 9, 2014	125	4459	1.09
5	5	10	Jan 10, 2014	88	5043	1.09
5.5	5.5	11	Jan 11, 2014	188	5239	1.09

## Stock-Format Data:

The screenshot shows the 'Data format' dialog box for the 'stock' column. The 'Format type' is set to 'Number'. The 'Number of decimal places' is set to 'Default'. The 'Negative sign symbol' is set to 'Default'. The 'Use thousands separator' is set to 'No'. The 'Negative sign position' is set to 'Default'. The 'Missing value characters' are set to '<empty>'. The 'Advanced options' button is visible at the bottom left, and the 'Reset properties' button is at the bottom right.

The screenshot shows the IBM Cognos Analytics interface. On the left, a 'Data module' sidebar lists dates from 2014-01-05 to 2014-01-15, along with 'Sales', 'stock', and 'price'. The main area displays a table with the following columns: 'M data', 'revenue data', 'Row Id', 'Year', 'Sales', 'stock', and 'price'. The data is as follows:

M data	revenue data	Row Id	Year	Sales	stock	price
0.5	0.5	1	Jan 1, 2014	0	4972	1.29
1	1	2	Jan 2, 2014	70	4902	1.29
1.5	1.5	3	Jan 3, 2014	59	4843	1.29
2	2	4	Jan 4, 2014	93	4750	1.29
2.5	2.5	5	Jan 5, 2014	96	4654	1.29
3	3	6	Jan 6, 2014	145	4509	1.29
3.5	3.5	7	Jan 7, 2014	179	4329	1.29
4	4	8	Jan 8, 2014	321	4104	1.29
4.5	4.5	9	Jan 9, 2014	125	4459	1.09
5	5	10	Jan 10, 2014	88	5043	1.09
5.5	5.5	11	Jan 11, 2014	188	5239	1.09

## Sales-Format Data:

The screenshot shows the 'Data format' dialog box in IBM Cognos Analytics. The 'Column' is set to 'Sales'. The 'Format type' is set to 'Number'. The following options are visible:

- Number of decimal places: Default
- Negative sign symbol: Default
- Use thousands separator: No
- Negative sign position: Default
- Missing value characters: <empty>

Buttons at the bottom include 'Advanced options' and 'Reset properties'.

The screenshot shows the IBM Cognos Analytics interface. On the left, a 'Data module' sidebar lists dates from 2014-01-05 to 2014-01-15, and a list of columns: Sales, stock, and price. The main area displays a table with the following data:

M data	revenue data	Row Id	Year	Sales	stock	price
0.5	0.5	1	Jan 1, 2014	0	4972	1.29
1	1	2	Jan 2, 2014	70	4902	1.29
1.5	1.5	3	Jan 3, 2014	59	4843	1.29
2	2	4	Jan 4, 2014	93	4750	1.29
2.5	2.5	5	Jan 5, 2014	96	4654	1.29
3	3	6	Jan 6, 2014	145	4509	1.29
3.5	3.5	7	Jan 7, 2014	179	4329	1.29
4	4	8	Jan 8, 2014	321	4104	1.29
4.5	4.5	9	Jan 9, 2014	125	4459	1.09
5	5	10	Jan 10, 2014	88	5043	1.09
5.5	5.5	11	Jan 11, 2014	188	5239	1.09

## Price-Format Data:

The screenshot shows the 'Column: price' format dialog box in IBM Cognos Analytics. The 'Format type' is set to 'Number'. The 'Number of decimal places' is set to 2. The 'Negative sign symbol' is set to 'Default'. The 'Use thousands separator' is set to 'No'. The 'Negative sign position' is set to 'Default'. The 'Missing value characters' are set to '<empty>'. The 'Advanced options' button is visible. The 'Reset properties' button is also present. The 'OK' button is highlighted in blue. The background shows a table with 'stock' and 'price' columns.

stock	price
4972	1.29
4902	1.29
4843	1.29
4750	1.29
4654	1.29
4509	1.29
4329	1.29
4104	1.29
4459	1.09
5043	1.09
5239	1.09

Z

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists various data sources including dates from 2014-01-05 to 2014-01-15, and tables named 'Sales', 'stock', and 'price'. The main area displays a grid view of the 'revenue data' table. The grid has columns for 'Row Id', 'Year', 'Sales', 'stock', and 'price'. The data is organized into rows, with the first row having a 'Row Id' of 1 and a 'Year' of 'Jan 1, 2014'. The 'Sales' column shows values ranging from 0 to 188, and the 'stock' column shows values ranging from 4654 to 5239. The 'price' column shows values ranging from 1.09 to 1.29.

Row Id	Year	Sales	stock	price
1	Jan 1, 2014	0	4972	1.29
2	Jan 2, 2014	70	4902	1.29
3	Jan 3, 2014	59	4843	1.29
4	Jan 4, 2014	93	4750	1.29
5	Jan 5, 2014	96	4654	1.29
6	Jan 6, 2014	145	4509	1.29
7	Jan 7, 2014	179	4329	1.29
8	Jan 8, 2014	321	4104	1.29
9	Jan 9, 2014	125	4459	1.09
10	Jan 10, 2014	88	5043	1.09
11	Jan 11, 2014	188	5239	1.09

## Revenue-Format Data:

The screenshot shows the 'Data format' dialog box in IBM Cognos Analytics. The dialog is for the 'revenue data' column. It displays the 'Format type' as 'Number'. Below this, there are several options for formatting the number, including 'Number of decimal places' (set to 0), 'Negative sign symbol' (set to 'Default'), 'Use thousands separator' (set to 'No'), 'Negative sign position' (set to 'Default'), and 'Missing value characters' (set to '<empty>'). There are also buttons for 'Advanced options' and 'Reset properties'.

Column	Format type	Number of decimal places	Negative sign symbol	Use thousands separator	Negative sign position	Missing value characters
revenue data	Number	0	Default	No	Default	<empty>

The screenshot displays the IBM Cognos Analytics interface. On the left, the 'Data module' pane shows a tree structure with 'New data module' at the top, followed by 'Navigation paths', 'mock\_ka...[1].csv', 'M data', and 'revenue data'. Below 'revenue data' are several date filters for January 2014. The main area shows a grid view of the 'revenue data' table with 11 rows. The columns are 'Row Id', 'Year', 'Sales', 'stock', and 'price'. The data shows daily sales and stock prices for January 2014.

Row Id	Year	Sales	stock	price
1	Jan 1, 2014	0	4972	1.29
1	Jan 2, 2014	70	4902	1.29
2	Jan 3, 2014	59	4843	1.29
2	Jan 4, 2014	93	4750	1.29
3	Jan 5, 2014	96	4654	1.29
3	Jan 6, 2014	145	4509	1.29
4	Jan 7, 2014	179	4329	1.29
4	Jan 8, 2014	321	4104	1.29
5	Jan 9, 2014	125	4459	1.09
5	Jan 10, 2014	88	5043	1.09
6	Jan 11, 2014	188	5239	1.09

## Prepared data link –

[https://us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.my\\_folders%2Fdata%2Bpreparation%2Band%2Bcollection](https://us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.my_folders%2Fdata%2Bpreparation%2Band%2Bcollection)