

Project Development Phase Delivery of Sprint-1

Team ID	PNT2022TMID47316
Project Name	Data Analytics- 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

Retail Store Stock Inventory Management



Project coordinator

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2. Abisha M

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Sprint-1

Data Collection

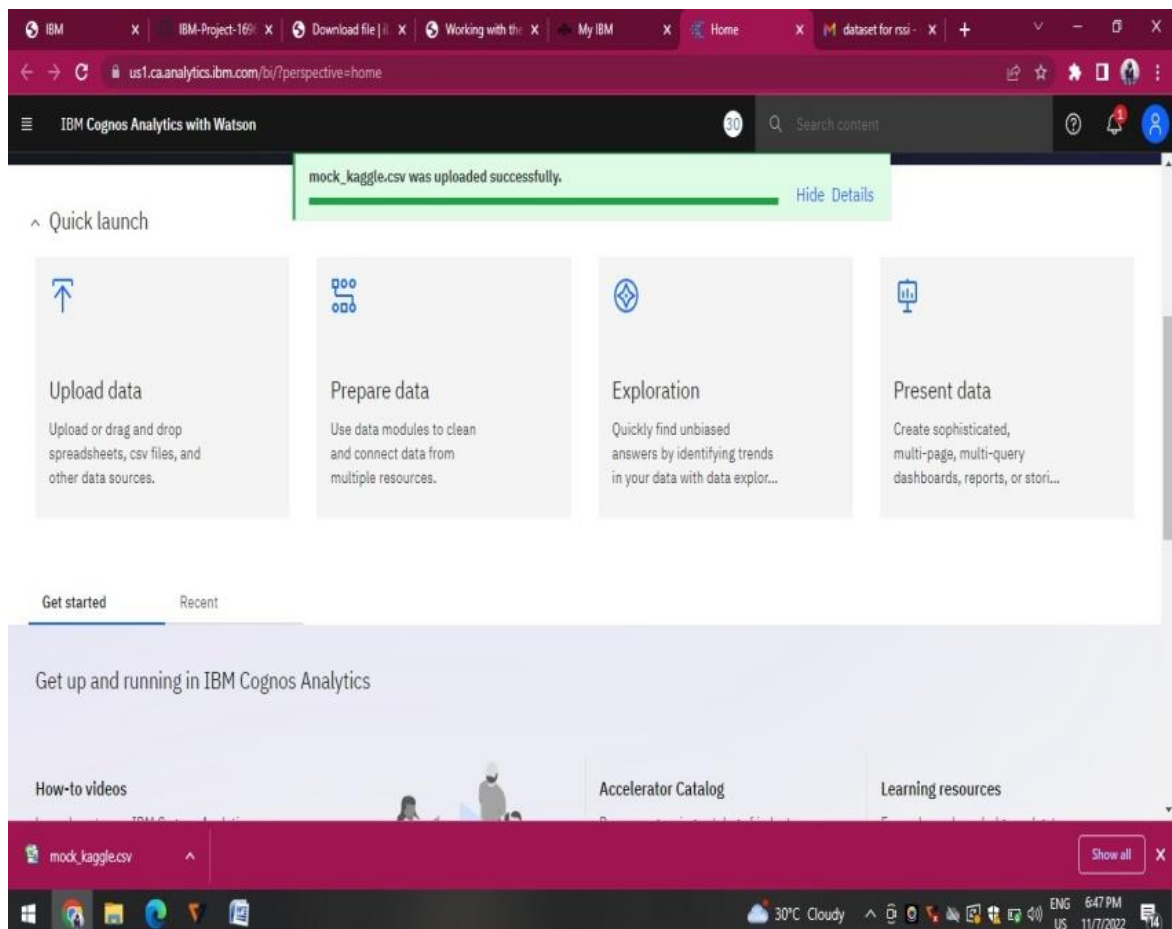
Download the Dataset

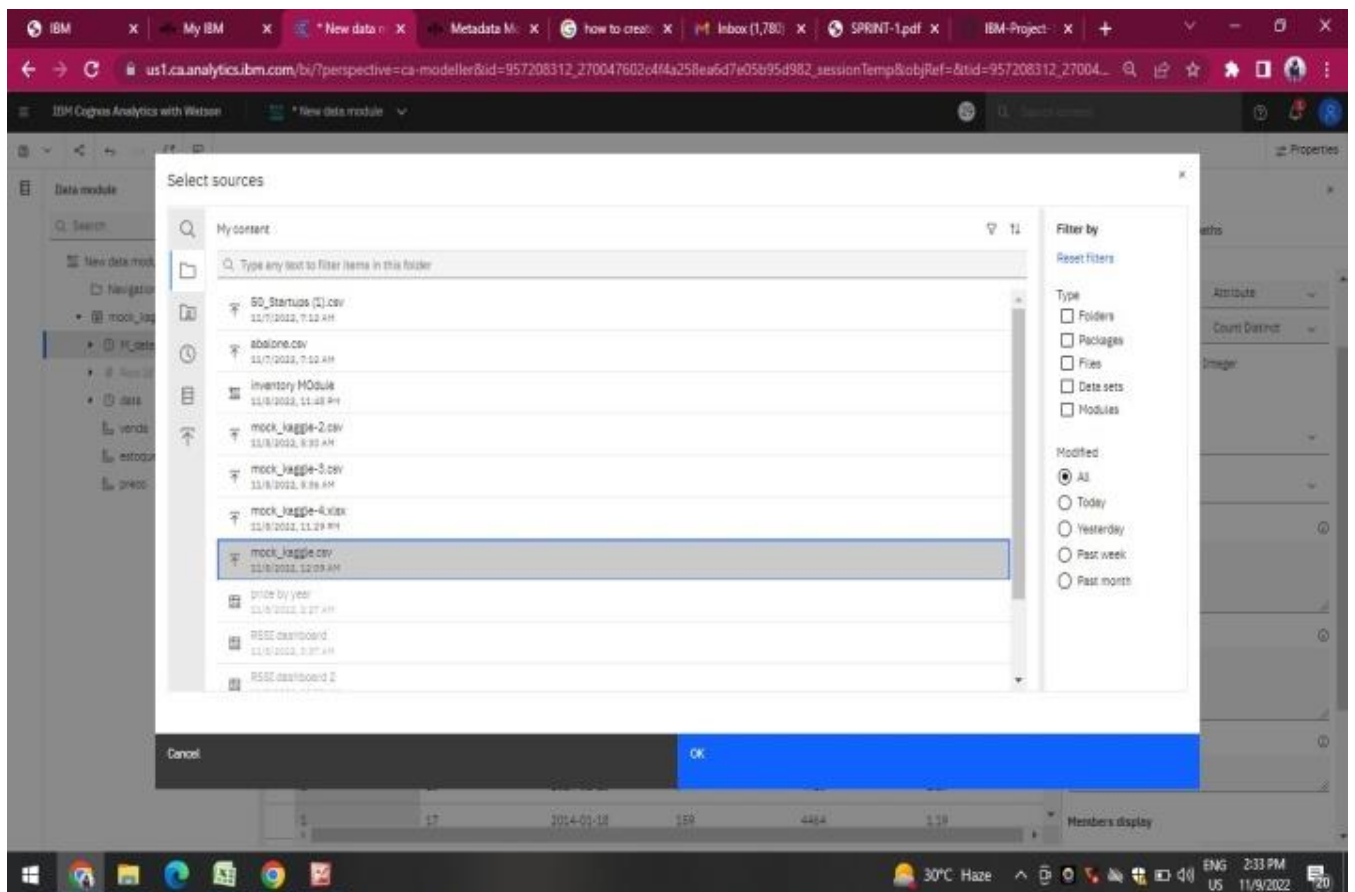
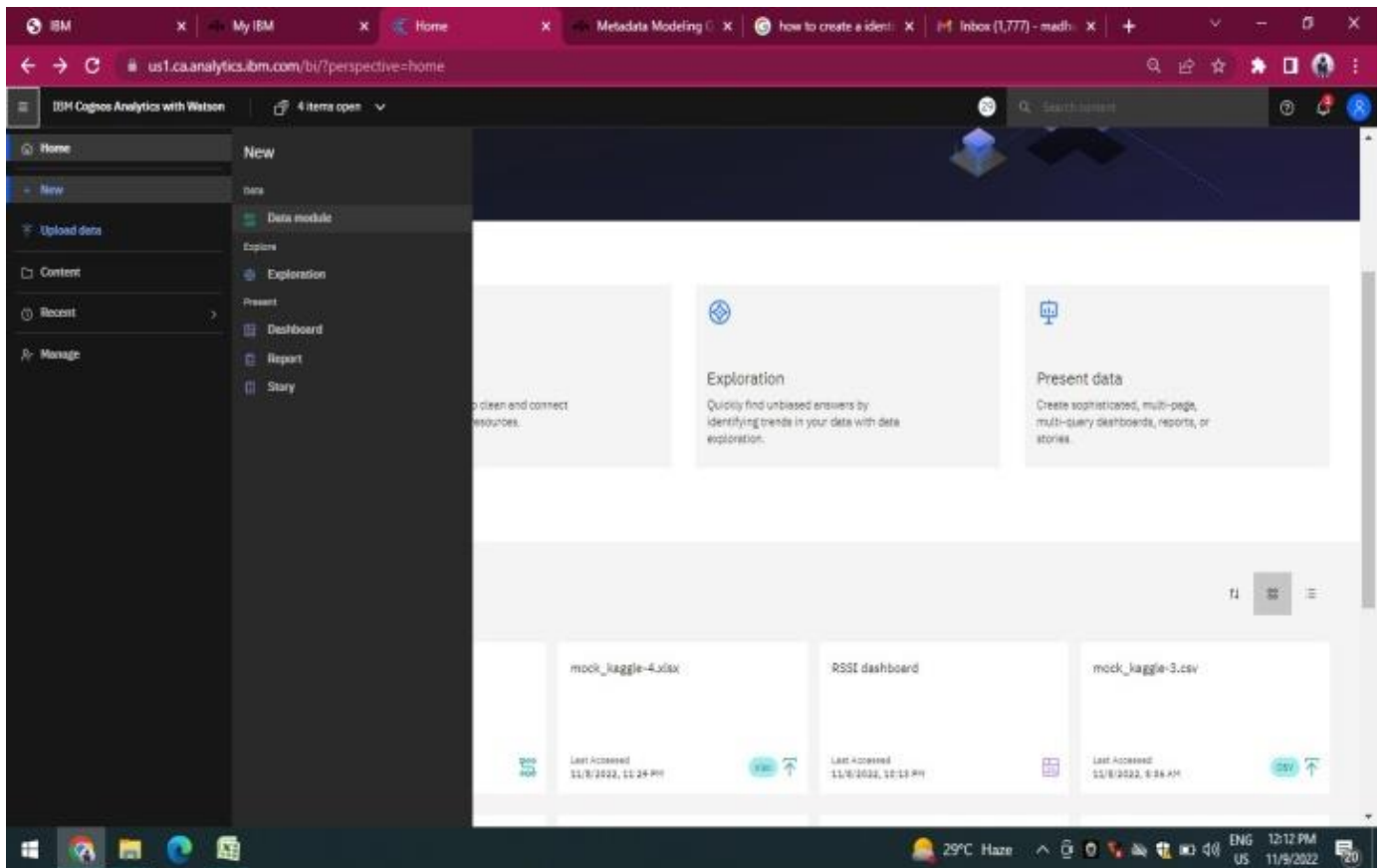
Dataset link -

<https://drive.google.com/drive/folders/1kiL-5CHJmQvbK9VyFsuUs-myAupBZGNy>

Load the Dataset

Tool used – IBM Cognos Analytics





Month data

IBM Cognos Analytics with Watson

Create calculation

Name: M_data

Expression: 1 month(data_)

Components:

- mock_kaggle.csv
 - # Row Id
 - data
 - venda
 - estoque
 - preco

Validation Results

The expression is valid.

IBM Cognos Analytics with Watson

Data module

Grid

Row Id	M_data	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	89	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	148	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	325	4489	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	5116	1.09
1	13	2014-01-13	134	4984	1.09
1	14	2014-01-14	80	4904	1.09
1	15	2014-01-15	82	4822	1.09
1	16	2014-01-16	94	4728	1.19
1	17	2014-01-18	159	4454	1.19

Properties

General

Usage: Attribute

Aggregate: Count Distinct

Data type: Integer

Represents: Time

Month: Month

Description:

Comments:

Screen tip:

Members display:

Revenue data

IBM Cognos Analytics with Watson

Search content

Properties

Data module

Grid Relationships Custom tables

revenue

Row Id	revenue	data	venda	estoque	price
1	0	2014-01-01	0	4972	
1	90.3	2014-01-02	70	4902	
1	76.11	2014-01-03	59	4843	
1	119.97	2014-01-04	93	4790	
1	123.84	2014-01-05	96	4684	
1	187.05	2014-01-06	145	4509	
1	230.91	2014-01-07	179	4329	
1	414.09	2014-01-08	321	4104	
1	136.25	2014-01-09	125	4459	
1	95.92	2014-01-10	88	5043	
1	204.92	2014-01-11	188	5239	
1	131.89	2014-01-12	121	5118	
1	146.06	2014-01-13	134	4984	
1	87.2	2014-01-14	80	4904	
1	89.38	2014-01-15	82	4822	
1	111.86	2014-01-16	94	4728	
1	189.21	2014-01-18	159	4464	

Properties

General

Label: revenue

Hide from users: ☐

Expression: View or edit

Usage: Measure

Aggregate: Total

Data type: Decimal

Represents: Default

Lookup reference: None

Description:

Comments:

Year data

IBM Cognos Analytics with Watson

Search content

Properties

Data module

Grid Relationships Custom tables

year

Row Id	revenue	data	venda	estoque	price
1	0	2014-01-01	0	4972	
1	90.3	2014-01-02	70	4902	
1	76.11	2014-01-03	59	4843	
1	119.97	2014-01-04	93	4790	
1	123.84	2014-01-05	96	4684	
1	187.05	2014-01-06	145	4509	
1	230.91	2014-01-07	179	4329	
1	414.09	2014-01-08	321	4104	
1	136.25	2014-01-09	125	4459	
1	95.92	2014-01-10	88	5043	
1	204.92	2014-01-11	188	5239	
1	131.89	2014-01-12	121	5118	
1	146.06	2014-01-13	134	4984	
1	87.2	2014-01-14	80	4904	
1	89.38	2014-01-15	82	4822	
1	111.86	2014-01-16	94	4728	
1	189.21	2014-01-18	159	4464	

Properties

General

Label: year

Hide from users: ☐

Expression: View or edit

Usage: Measure

Aggregate: Count

Data type: Text

Represents: Year

Lookup reference: None

Description:

Comments:

Sales data

The screenshot displays the IBM Cognos Analytics interface. The main window shows a data table with columns: M_data, Row Id, revenue, year, sales, and estoque. The 'sales' column is highlighted. The left sidebar shows the 'Data module' with a search bar and a list of items: link, Navigation paths, mock_kaggle.csv, M_data, # Row Id, revenue, year, sales, estoque, and preco. The 'sales' item is selected. The right sidebar shows the 'Properties' panel for the 'sales' column, with fields for Label, Hide from users, Expression, Usage, Aggregate, Data type, Represents, Default, Lookup reference, Description, and Comments.

M_data	Row Id	revenue	year	sales	estoque
1	1	0	2014-01-01	0	4972
1	2	90.3	2014-01-02	70	4902
1	3	76.11	2014-01-03	59	4843
1	4	119.97	2014-01-04	93	4750
1	5	123.84	2014-01-05	96	4654
1	6	187.05	2014-01-06	145	4509
1	7	230.91	2014-01-07	179	4329
1	8	414.09	2014-01-08	321	4104
1	9	136.25	2014-01-09	125	4459
1	10	95.92	2014-01-10	88	5043
1	11	204.92	2014-01-11	188	5239
1	12	131.89	2014-01-12	121	5118
1	13	146.06	2014-01-13	134	4984
1	14	87.2	2014-01-14	80	4904
1	15	89.38	2014-01-15	82	4822
1	16	111.86	2014-01-16	94	4728
1	17	189.21	2014-01-18	159	4464

Stock data

The screenshot displays the IBM Cognos Analytics interface. The main window shows a data table with columns: M_data, Row Id, revenue, year, sales, and stock. The 'stock' column is highlighted. The left sidebar shows the 'Data module' with a search bar and a list of items: link, Navigation paths, mock_kaggle.csv, M_data, # Row Id, revenue, year, sales, stock, and preco. The 'stock' item is selected. The right sidebar shows the 'Properties' panel for the 'stock' column, with fields for Label, Hide from users, Expression, Usage, Aggregate, Data type, Represents, Default, Lookup reference, Description, and Comments.

M_data	Row Id	revenue	year	sales	stock
1	1	0	2014-01-01	0	4972
1	2	90.3	2014-01-02	70	4902
1	3	76.11	2014-01-03	59	4843
1	4	119.97	2014-01-04	93	4750
1	5	123.84	2014-01-05	96	4654
1	6	187.05	2014-01-06	145	4509
1	7	230.91	2014-01-07	179	4329
1	8	414.09	2014-01-08	321	4104
1	9	136.25	2014-01-09	125	4459
1	10	95.92	2014-01-10	88	5043
1	11	204.92	2014-01-11	188	5239
1	12	131.89	2014-01-12	121	5118
1	13	146.06	2014-01-13	134	4984
1	14	87.2	2014-01-14	80	4904
1	15	89.38	2014-01-15	82	4822
1	16	111.86	2014-01-16	94	4728
1	17	189.21	2014-01-18	159	4464

Price data

The screenshot shows the IBM Cognos Analytics interface. The main data table has the following columns: Row Id, revenue, year, sales, stock, and price. The 'price' column is highlighted in the Properties panel on the right. The Properties panel shows the following settings for the 'price' column:

- Label: price
- Hide from users: ☐
- Expression: View or edit >
- Usage: Measure
- Aggregate: Total
- Data type: Decimal
- Represents: Default
- Lookup reference: None
- Description:
- Comments:

Row Id	revenue	year	sales	stock	price
1	0	2014-01-01	0	4972	1.29
2	90.3	2014-01-02	70	4902	1.29
3	76.11	2014-01-03	59	4843	1.29
4	119.97	2014-01-04	93	4750	1.29
5	123.84	2014-01-05	96	4654	1.29
6	187.06	2014-01-06	145	4509	1.29
7	230.91	2014-01-07	179	4329	1.29
8	414.09	2014-01-08	321	4104	1.29
9	136.25	2014-01-09	125	4459	1.09
10	95.92	2014-01-10	88	5043	1.09
11	204.92	2014-01-11	188	5239	1.09
12	131.89	2014-01-12	121	5118	1.09
13	146.06	2014-01-13	134	4984	1.09
14	87.2	2014-01-14	80	4904	1.09
15	89.38	2014-01-15	82	4822	1.09
16	111.86	2014-01-16	94	4728	1.19
17	189.21	2014-01-18	159	4464	1.19

Month-Format Date

The screenshot shows the IBM Cognos Analytics interface with the 'Data format' dialog box open for the 'M_data' column. The dialog is set to 'Date' format with the following settings:

- Format type: Date
- Date separator: /
- Date style: Short
- Date ordering: Default
- Missing value characters: <empty>

The 'Data format' dialog box is shown with the following settings:

- Column: M_data
- Format type: Date
- Date separator: /
- Date style: Short
- Date ordering: Default
- Missing value characters: <empty>

Row Id	revenue	year	sales	stock	price
1	0	2014-01-01	0	4972	1.29
2	90.3	2014-01-02	70	4902	1.29
3	76.11	2014-01-03	59	4843	1.29
4	119.97	2014-01-04	93	4750	1.29
5	123.84	2014-01-05	96	4654	1.29
6	187.06	2014-01-06	145	4509	1.29
7	230.91	2014-01-07	179	4329	1.29
8	414.09	2014-01-08	321	4104	1.29
9	136.25	2014-01-09	125	4459	1.09
10	95.92	2014-01-10	88	5043	1.09
11	204.92	2014-01-11	188	5239	1.09
12	131.89	2014-01-12	121	5118	1.09
13	146.06	2014-01-13	134	4984	1.09
14	87.2	2014-01-14	80	4904	1.09
15	89.38	2014-01-15	82	4822	1.09
16	111.86	2014-01-16	94	4728	1.19
17	189.21	2014-01-18	159	4464	1.19

The screenshot shows the IBM Cognos Analytics interface. The main data grid displays the following data:

Row Id	revenue	year	sales	stock
1	0	1/1/14	0	4972
1	90	1/2/14	70	4902
1	76	1/3/14	59	4843
1	120	1/4/14	93	4750
1	124	1/5/14	96	4654
1	187	1/6/14	145	4509
1	231	1/7/14	179	4329
1	414	1/8/14	321	4104
1	136	1/9/14	125	4459
1	96	1/10/14	88	5043
1	205	1/11/14	188	5239
1	132	1/12/14	121	5118
1	146	1/13/14	134	4984
1	87	1/14/14	80	4904
1	89	1/15/14	82	4822
1	112	1/16/14	94	4728
1	189	1/18/14	159	4464

The 'Properties' panel on the right shows the following settings for 'M_data':

- Label: M_data
- Hide from users: ☐
- Expression: View or edit >
- Usage: Attribute
- Aggregate: Count Distinct
- Data type: Integer
- Represents: Time
- Month:
- Description:
- Comments:
- Screen tip:

Revenue-Format Data

The screenshot shows the 'Data format' dialog box for the 'revenue' column. The dialog has the following settings:

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

The dialog also includes buttons for 'Advanced options', 'Reset properties', 'Cancel', and 'OK'.

IBM Cognos Analytics with Watson

us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=iC0649AD76B1B437891ABFCC0EEE28A1A&objRef=iC0649AD76B1B437891ABFCC0EEE28A1A&tid...

Data module

link

Navigation paths

mock_kaggle.csv

M_data

Row Id

revenue

year

sales

stock

price

Grid

M_data	Row Id	revenue	year	sales	stock
1	1	0	1/1/14	0	4972
1	2	90	1/2/14	70	4902
1	3	76	1/3/14	59	4843
1	4	120	1/4/14	93	4750
1	5	124	1/5/14	96	4654
1	6	187	1/6/14	145	4509
1	7	231	1/7/14	179	4329
1	8	414	1/8/14	321	4104
1	9	136	1/9/14	125	4459
1	10	96	1/10/14	88	5043
1	11	205	1/11/14	188	5239
1	12	132	1/12/14	121	5118
1	13	146	1/13/14	134	4984
1	14	87	1/14/14	80	4904
1	15	89	1/15/14	82	4822
1	16	112	1/16/14	94	4728
1	17	189	1/18/14	159	4464

Properties

General

Label: revenue

Hide from users: ☐

Expression: View or edit >

Usage: Measure

Aggregate: Total

Data type: Decimal

Represents: Default

Lookup reference: None

Description:

Comments:

Year-Format Data

IBM Cognos Analytics with Watson

us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=iC0649AD76B1B437891ABFCC0EEE28A1A&objRef=iC0649AD76B1B437891ABFCC0EEE28A1A&tid...

Data module

link

Navigation paths

mock_kaggle.csv

M_data

Row Id

revenue

year

sales

stock

price

Grid

M_data	Row Id	revenue	year	sales	stock
1	1	0	1/1/14	0	4972
1	2	90	1/2/14	70	4902
1	3	76	1/3/14	59	4843
1	4	120	1/4/14	93	4750
1	5	124	1/5/14	96	4654
1	6	187	1/6/14	145	4509
1	7	231	1/7/14	179	4329
1	8	414	1/8/14	321	4104
1	9	136	1/9/14	125	4459
1	10	96	1/10/14	88	5043
1	11	205	1/11/14	188	5239
1	12	132	1/12/14	121	5118
1	13	146	1/13/14	134	4984
1	14	87	1/14/14	80	4904
1	15	89	1/15/14	82	4822
1	16	112	1/16/14	94	4728
1	17	189	1/18/14	159	4464

Data format

Column: year

Format type: Date

Date separator: /

Date style: Short

Date ordering: Default

Missing value characters: <empty>

Advanced options

Reset properties

Cancel

OK

Properties

General

Label: year

Hide from users: ☐

Expression: View or edit >

Usage: Attribute

Aggregate: Count Distinct

Data type: Date

Represents: Time

Year: Year

Lookup reference: None

Description:

Comments:

The screenshot shows the IBM Cognos Analytics interface. The main data table is displayed with the following columns: T1, M_data, Row Id, revenue, year, sales, stock, and price. The 'year' column is highlighted in the Properties panel on the right. The Properties panel shows the following settings for the 'year' column:

- Label: year
- Hide from users: ☐
- Expression: View or edit
- Usage: Attribute
- Aggregate: Count Distinct
- Data type: Date
- Represents: Time
- Year: 1/1/14
- Lookup reference: None
- Description:
- Comments:

Sales-Format Data

The screenshot shows the IBM Cognos Analytics interface with a 'Data format' dialog box open for the 'sales' column. The dialog box has the following settings:

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

The dialog box also includes buttons for 'Advanced options', 'Reset properties', 'Cancel', and 'OK'.

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists various data sources. The main area displays a data table with the following columns: M_data, Row Id, revenue, year, sales, stock, and price. The 'sales' column is highlighted. On the right, the 'Properties' panel shows the configuration for the 'sales' column, including its label, usage (Measure), aggregate (Total), and data type (Integer).

M_data	Row Id	revenue	year	sales	stock	price
1	1	0	1/1/14	0	4972	
1	2	90	1/2/14	70	4902	
1	3	76	1/3/14	59	4843	
1	4	120	1/4/14	93	4750	
1	5	124	1/5/14	96	4654	
1	6	187	1/6/14	145	4509	
1	7	291	1/7/14	179	4329	
1	8	414	1/8/14	321	4104	
1	9	136	1/9/14	125	4459	
1	10	96	1/10/14	88	5043	
1	11	205	1/11/14	188	5239	
1	12	132	1/12/14	121	5118	
1	13	146	1/13/14	134	4984	
1	14	87	1/14/14	80	4904	
1	15	89	1/15/14	82	4822	
1	16	112	1/16/14	94	4728	
1	17	189	1/18/14	159	4464	

Stock-Format Data

The screenshot shows the IBM Cognos Analytics interface with the 'Data format' dialog box open for the 'stock' column. The dialog allows configuring the format type (Number), decimal places (0), negative sign symbol (Default), thousands separator (No), negative sign position (Default), and missing value characters (<empty>). The 'Advanced options' button is visible at the bottom of the dialog.

M_data	Row Id	revenue	year	sales	stock	price
1	1	0	1/1/14	0	4972	
1	2	90	1/2/14	70	4902	
1	3	76	1/3/14	59	4843	
1	4	120	1/4/14	93	4750	
1	5	124	1/5/14	96	4654	
1	6	187	1/6/14	145	4509	
1	7	291	1/7/14	179	4329	
1	8	414	1/8/14	321	4104	
1	9	136	1/9/14	125	4459	
1	10	96	1/10/14	88	5043	
1	11	205	1/11/14	188	5239	
1	12	132	1/12/14	121	5118	
1	13	146	1/13/14	134	4984	
1	14	87	1/14/14	80	4904	
1	15	89	1/15/14	82	4822	
1	16	112	2014-01-16	94	4728	
1	17	189	2014-01-18	159	4464	

The screenshot shows the IBM Cognos Analytics interface. The main data table has the following columns: M_data, Row Id, revenue, year, sales, and stock. The 'stock' column is highlighted in the Properties panel on the right. The Properties panel shows the following settings for the 'stock' column:

- Label: stock
- Hide from users: ☐
- Expression: [View or edit](#)
- Usage: Measure
- Aggregate: Total
- Data type: Integer
- Represents:
- Default:
- Lookup reference: None
- Description:
- Comments:

Price-Format Data

The screenshot shows the IBM Cognos Analytics interface with the 'Data format' dialog box open for the 'price' column. The dialog box has the following settings:

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

The dialog box also has buttons for 'Advanced options', 'Reset properties', 'Cancel', and 'OK'.

The screenshot shows the IBM Cognos Analytics web interface. The main area displays a data table with the following columns: Row Id, revenue, year, sales, stock, and price. The 'price' column is highlighted in the table and in the Properties panel on the right. The Properties panel shows the 'General' tab with the following settings:

- Label: price
- Hide from users: ☐
- Expression: View or edit >
- Usage: Measure
- Aggregate: Total
- Data type: Decimal
- Represents: Default
- Lookup reference: None
- Description: (empty)
- Comments: (empty)

The data table contains 17 rows of data. The 'price' column values are all 1. The 'year' column values range from 1/1/14 to 1/18/14. The 'revenue' column values range from 0 to 414. The 'sales' column values range from 0 to 321. The 'stock' column values range from 4572 to 4464.

PREPARED DATA LINK

https://us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.my_folders%2Flink