

# Retail Store Stock Inventory Analytics

## WORKING WITH THE DATASET

The image displays two screenshots of the IBM Cognos Analytics interface, illustrating the process of working with a dataset.

**Top Screenshot:** The interface shows the "Recent" view of the "us3.ca.analytics.ibm.com/bi/?perspective=home" dashboard. A green notification bar at the top indicates "mock\_kaggle.csv was uploaded successfully." Below the notification, the "Quick launch" section provides options to "Upload data", "Prepare data", "Exploration", and "Present data". The main area displays a grid of data sources, including "mock\_kaggle.csv", "Inventory Management dataset.zip", "Retail Store stock data module", "assignment 1", "inventory", "Pharma sales dashboard", "product sale data module", "sales analytics story", "sales analytics report", and "sales.csv".

**Bottom Screenshot:** The "Select sources" dialog box is open, showing a search bar and a list of items. The "mock\_kaggle.csv" file is selected. The "Filter by" section on the right allows filtering by "Type" (Folders, Packages, Files, Data sets, Modules) and "Modified" (All, Today, Yesterday, Past week, Past month).

# Retail Store Stock Inventory Analytics

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' sidebar is open, displaying a search bar and a tree view of the data structure. The tree view includes 'New data module', 'Navigation paths', and a folder named 'mock\_kaggle.csv'. Inside this folder, the following fields are listed: '# Row Id', 'Date', 'Sold', 'Stock', and 'Price'. The main area of the interface displays a grid view of the data. The grid has columns for 'Row Id', 'Date', 'Sold', 'Stock', and 'Price'. The data is organized into 19 rows, each representing a date from 2014-01-01 to 2014-01-20. The 'Sold' column shows the number of items sold, the 'Stock' column shows the remaining stock, and the 'Price' column shows the unit price. The bottom of the interface shows a Windows taskbar with various application icons and a system clock indicating 10:21 AM on 11/5/2022.

Row Id	Date	Sold	Stock	Price
1	2014-01-01	0	4972	1.29
2	2014-01-02	70	4902	1.29
3	2014-01-03	59	4843	1.29
4	2014-01-04	93	4750	1.29
5	2014-01-05	96	4654	1.29
6	2014-01-06	145	4509	1.29
7	2014-01-07	179	4329	1.29
8	2014-01-08	321	4104	1.29
9	2014-01-09	125	4459	1.09
10	2014-01-10	88	5043	1.09
11	2014-01-11	188	5239	1.09
12	2014-01-12	121	5118	1.09
13	2014-01-13	134	4984	1.09
14	2014-01-14	80	4904	1.09
15	2014-01-15	82	4822	1.09
16	2014-01-16	94	4728	1.19
17	2014-01-18	159	4464	1.19
18	2014-01-19	199	4265	1.19
19	2014-01-20	104	4161	1.19

This screenshot is similar to the one above, but with a context menu open over the grid. The menu is triggered by right-clicking on the grid, and it displays a variety of actions that can be performed on the data. The 'New' option is highlighted, which typically leads to creating a new calculation or filter. Other options include 'Filter...', 'Folder', 'Table...', 'Show query information...', 'Specify column dependencies', 'Refresh members', 'Hide from users', 'Remove', 'Refresh properties...', 'Sort...', 'Rename', 'Cut', 'Copy', 'Manage filters', and 'Properties'. The background data grid remains the same, showing the retail store stock inventory data for the period of 2014-01-01 to 2014-01-20. The bottom of the interface shows a Windows taskbar with various application icons and a system clock indicating 10:23 AM on 11/5/2022.

Row Id	Date	Sold	Stock	Price
1	2014-01-01	0	4972	1.29
2	2014-01-02	70	4902	1.29
3	2014-01-03	59	4843	1.29
4	2014-01-04	93	4750	1.29
5	2014-01-05	96	4654	1.29
6	2014-01-06	145	4509	1.29
7	2014-01-07	179	4329	1.29
8	2014-01-08	321	4104	1.29
9	2014-01-09	125	4459	1.09
10	2014-01-10	88	5043	1.09
11	2014-01-11	188	5239	1.09
12	2014-01-12	121	5118	1.09
13	2014-01-13	134	4984	1.09
14	2014-01-14	80	4904	1.09
15	2014-01-15	82	4822	1.09
16	2014-01-16	94	4728	1.19
17	2014-01-18	159	4464	1.19
18	2014-01-19	199	4265	1.19
19	2014-01-20	104	4161	1.19

# Retail Store Stock Inventory Analytics

The image displays two screenshots of the IBM Cognos Analytics 'Create calculation' dialog, showing the process of defining a calculation expression.

**Top Screenshot:**

- Name:** Calculation name
- Components:** mock\_kaggle.csv
  - # Row Id
  - Date
  - Sold
  - Stock
  - Price
- Expression:** 1
- Information:** (Empty panel)
- Buttons:** Calculate after aggregation (checkbox), Cancel, OK

**Bottom Screenshot:**

- Name:** M\_Date
- Components:** mock\_kaggle.csv
  - # Row Id
  - Date (Expanded list):
    - 2014-01-01
    - 2014-01-02
    - 2014-01-03
    - 2014-01-04
    - 2014-01-05
    - 2014-01-06
    - 2014-01-07
    - 2014-01-08
    - 2014-01-09
    - 2014-01-10
    - 2014-01-11
    - 2014-01-12
    - 2014-01-13
    - 2014-01-14
- Expression:** 1 month [Date\_1]
- Validation Results:** The expression is valid.
- Buttons:** Calculate after aggregation (checkbox), Cancel, OK

PNT2022TMID30228

# Retail Store Stock Inventory Analytics

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane displays a tree structure with 'mock\_kaggle.csv' selected. The main grid view shows a table with columns: M\_Date, Row Id, Date, Sold, Stock, and Price. The table contains 38 rows of data, starting from 2014-01-21 and ending on 2014-02-08. The bottom of the screen shows a Windows taskbar with various application icons and a search bar.

M_Date	Row Id	Date	Sold	Stock	Price
1	20	2014-01-21	70	4091	1.19
1	21	2014-01-22	127	3964	1.09
1	22	2014-01-23	96	3868	1.09
1	23	2014-01-24	75	3793	1.09
1	24	2014-01-25	198	3595	1.09
1	25	2014-01-26	168	3427	1.09
1	26	2014-01-27	125	3302	1.09
1	27	2014-01-28	86	3216	1.09
1	28	2014-01-29	222	2994	0.99
1	29	2014-01-30	272	2723	0.99
1	30	2014-01-31	209	2514	0.99
2	31	2014-02-01	369	2145	0.99
2	32	2014-02-02	217	1928	0.99
2	33	2014-02-03	97	1831	0.99
2	34	2014-02-04	117	1714	0.99
2	35	2014-02-05	100	1998	1.29
2	36	2014-02-06	64	2126	1.29
2	37	2014-02-07	35	2091	1.29
2	38	2014-02-08	54	2037	1.29

This screenshot is similar to the first one but includes the 'Properties' pane on the right side. The 'M\_Date' column is selected in the grid. The 'Properties' pane shows settings for the selected column, including 'Label' (M\_Date), 'Expression' (View or edit), 'Usage' (Attribute), 'Aggregate' (Count Distinct), 'Data type' (Integer), 'Represents' (Time), 'Month', 'Description', 'Comments', 'Screen tip', and 'Members display' (Show members, Sort members by M\_Date, Members order Ascending, NULL values First).

M_Date	Row Id	Date	Sold	Stock	Price
1	20	2014-01-21	70	4091	1.19
1	21	2014-01-22	127	3964	1.09
1	22	2014-01-23	96	3868	1.09
1	23	2014-01-24	75	3793	1.09
1	24	2014-01-25	198	3595	1.09
1	25	2014-01-26	168	3427	1.09
1	26	2014-01-27	125	3302	1.09
1	27	2014-01-28	86	3216	1.09
1	28	2014-01-29	222	2994	0.99
1	29	2014-01-30	272	2723	0.99
1	30	2014-01-31	209	2514	0.99
2	31	2014-02-01	369	2145	0.99
2	32	2014-02-02	217	1928	0.99
2	33	2014-02-03	97	1831	0.99
2	34	2014-02-04	117	1714	0.99
2	35	2014-02-05	100	1998	1.29
2	36	2014-02-06	64	2126	1.29
2	37	2014-02-07	35	2091	1.29
2	38	2014-02-08	54	2037	1.29
2	39	2014-02-09	85	1982	1.29
2	40	2014-02-12	8	7228	1.29
2	41	2014-02-13	43	7185	1.09
2	42	2014-02-14	107	7078	1.09

# Retail Store Stock Inventory Analytics

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists 'M\_Date' and 'Date'. The main grid displays a table with columns: T1, M\_Date, Row Id, Date, Sold, Stock, and Price. The 'Date' column is highlighted. On the right, the 'Properties' panel shows the 'Date' column's properties, including 'Expression', 'Usage', 'Aggregate', 'Data type', 'Represents', 'Time', 'Year', 'Lookup reference', 'Description', 'Comments', 'Screen tip', and 'Members display'.

T1	M_Date	Row Id	Date	Sold	Stock	Price
1	20	20	2014-01-21	70	4091	1.19
1	21	21	2014-01-22	127	3964	1.09
1	22	22	2014-01-23	96	3868	1.09
1	23	23	2014-01-24	78	3793	1.09
1	24	24	2014-01-25	198	3696	1.09
1	25	25	2014-01-26	168	3427	1.09
1	26	26	2014-01-27	126	3302	1.09
1	27	27	2014-01-28	86	3216	1.09
1	28	28	2014-01-29	222	2994	0.99
1	29	29	2014-01-30	272	2723	0.99
1	30	30	2014-01-31	209	2614	0.99
2	31	31	2014-02-01	369	2146	0.99
2	32	32	2014-02-02	217	1928	0.99
2	33	33	2014-02-03	97	1831	0.99
2	34	34	2014-02-04	117	1714	0.99
2	35	35	2014-02-05	100	1998	1.29
2	36	36	2014-02-06	64	2126	1.29
2	37	37	2014-02-07	36	2091	1.29
2	38	38	2014-02-08	64	2037	1.29
2	39	39	2014-02-09	66	1982	1.29
2	40	40	2014-02-12	8	7228	1.29
2	41	41	2014-02-13	43	7186	1.09
2	42	42	2014-02-14	107	7078	1.09

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists 'sales', 'Stock', and 'Price'. The main grid displays a table with columns: T1, M\_Date, Row Id, Date, sales, Stock, and Price. The 'sales' column is highlighted. On the right, the 'Properties' panel shows the 'sales' column's properties, including 'Label', 'Hide from users', 'Expression', 'Usage', 'Aggregate', 'Data type', 'Represents', 'Default', 'Lookup reference', 'Description', 'Comments', 'Screen tip', and 'Advanced'.

T1	M_Date	Row Id	Date	sales	Stock	Price
1	20	20	2014-01-21	70	4091	1.19
1	21	21	2014-01-22	127	3964	1.09
1	22	22	2014-01-23	96	3868	1.09
1	23	23	2014-01-24	78	3793	1.09
1	24	24	2014-01-25	198	3696	1.09
1	25	25	2014-01-26	168	3427	1.09
1	26	26	2014-01-27	126	3302	1.09
1	27	27	2014-01-28	86	3216	1.09
1	28	28	2014-01-29	222	2994	0.99
1	29	29	2014-01-30	272	2723	0.99
1	30	30	2014-01-31	209	2614	0.99
2	31	31	2014-02-01	369	2146	0.99
2	32	32	2014-02-02	217	1928	0.99
2	33	33	2014-02-03	97	1831	0.99
2	34	34	2014-02-04	117	1714	0.99
2	35	35	2014-02-05	100	1998	1.29
2	36	36	2014-02-06	64	2126	1.29
2	37	37	2014-02-07	36	2091	1.29
2	38	38	2014-02-08	64	2037	1.29
2	39	39	2014-02-09	66	1982	1.29
2	40	40	2014-02-12	8	7228	1.29
2	41	41	2014-02-13	43	7186	1.09
2	42	42	2014-02-14	107	7078	1.09

# Retail Store Stock Inventory Analytics

IBM Cognos Analytics with Watson

Data module: New data module

Grid

T1	M_Date	Row Id	Date	sales	Stock	Price
1	20	20	2014-01-21	70	4091	1.19
1	21	21	2014-01-22	127	3964	1.09
1	22	22	2014-01-23	96	3868	1.09
1	23	23	2014-01-24	78	3793	1.09
1	24	24	2014-01-25	198	3696	1.09
1	25	25	2014-01-26	168	3427	1.09
1	26	26	2014-01-27	126	3302	1.09
1	27	27	2014-01-28	86	3216	1.09
1	28	28	2014-01-29	222	2994	0.99
1	29	29	2014-01-30	272	2723	0.99
1	30	30	2014-01-31	209	2614	0.99
2	31	31	2014-02-01	369	2146	0.99
2	32	32	2014-02-02	217	1928	0.99
2	33	33	2014-02-03	97	1831	0.99
2	34	34	2014-02-04	117	1714	0.99
2	35	35	2014-02-05	100	1998	1.29
2	36	36	2014-02-06	64	2126	1.29
2	37	37	2014-02-07	36	2091	1.29
2	38	38	2014-02-08	64	2037	1.29
2	39	39	2014-02-09	66	1982	1.29
2	40	40	2014-02-12	8	7228	1.29
2	41	41	2014-02-13	43	7186	1.09
2	42	42	2014-02-14	107	7078	1.09

Properties

General

Label: Stock

Hide from users: ☐

Expression: View or edit

Usage: Measure

Aggregate: Total

Data type: Integer

Represents: Default

Lookup reference: None

Description:

Comments:

Screen tip:

Advanced:

IBM Cognos Analytics with Watson

Data module: New data module

Grid

T1	M_Date	Row Id	Date	sales	Stock	Price
1	20	20	2014-01-21	70	4091	1.19
1	21	21	2014-01-22	127	3964	1.09
1	22	22	2014-01-23	96	3868	1.09
1	23	23	2014-01-24	78	3793	1.09
1	24	24	2014-01-25	198	3696	1.09
1	25	25	2014-01-26	168	3427	1.09
1	26	26	2014-01-27	126	3302	1.09
1	27	27	2014-01-28	86	3216	1.09
1	28	28	2014-01-29	222	2994	0.99
1	29	29	2014-01-30	272	2723	0.99
1	30	30	2014-01-31	209	2614	0.99
2	31	31	2014-02-01	369	2146	0.99
2	32	32	2014-02-02	217	1928	0.99
2	33	33	2014-02-03	97	1831	0.99
2	34	34	2014-02-04	117	1714	0.99
2	35	35	2014-02-05	100	1998	1.29
2	36	36	2014-02-06	64	2126	1.29
2	37	37	2014-02-07	36	2091	1.29
2	38	38	2014-02-08	64	2037	1.29
2	39	39	2014-02-09	66	1982	1.29
2	40	40	2014-02-12	8	7228	1.29
2	41	41	2014-02-13	43	7186	1.09
2	42	42	2014-02-14	107	7078	1.09

Properties

General

Label: Price

Hide from users: ☐

Expression: View or edit

Usage: Measure

Aggregate: Total

Data type: Decimal

Represents: Default

Lookup reference: None

Description:

Comments:

Screen tip:

Advanced:

Doc1 - Microsoft Word

# Retail Store Stock Inventory Analytics

IBM Cognos Analytics with Watson

Data module

Grid Relationships Custom tables

T1	M_Date	Row Id	year	sales	Stock	Price
1	20	1	2014-01-21	70	4091	1.19
1	21	1	2014-01-22	127	3964	1.09
1	22	1	2014-01-23	96	3868	1.09
1	23	1	2014-01-24	78	3793	1.09
1	24	1	2014-01-25	198	3698	1.09
1	25	1	2014-01-26	168	3427	1.09
1	26	1	2014-01-27	125	3302	1.09
1	27	1	2014-01-28	86	3216	1.09
1	28	1	2014-01-29	222	2994	0.99
1	29	1	2014-01-30	272	2723	0.99
1	30	1	2014-01-31	209	2614	0.99
2	31	2	2014-02-01	369	2148	0.99
2	32	2	2014-02-02	217	1928	0.99
2	33	2	2014-02-03	97	1831	0.99
2	34	2	2014-02-04	117	1714	0.99
2	35	2	2014-02-05	100	1998	1.29
2	36	2	2014-02-06	64	2126	1.29
2	37	2	2014-02-07	85	2091	1.29
2	38	2	2014-02-08	64	2037	1.29
2	39	2	2014-02-09	85	1982	1.29
2	40	2	2014-02-12	8	7228	1.29
2	41	2	2014-02-13	43	7185	1.09
2	42	2	2014-02-14	107	7078	1.09

Properties

General Navigation paths

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: Description

Comments: Comments

Screen tip: Screen tip

Members display

Display options: Show members

Sort members by: year

IBM Cognos Analytics with Watson

Data module

Grid Relationships Custom tables

T1	M_Date	Row Id	year	sales	Stock	Price
1	20	1	2014-01-21	70	4091	1.19
1	21	1	2014-01-22	127	3964	1.09
1	22	1	2014-01-23	96	3868	1.09
1	23	1	2014-01-24	78	3793	1.09
1	24	1	2014-01-25	198	3698	1.09
1	25	1	2014-01-26	168	3427	1.09
1	26	1	2014-01-27	125	3302	1.09
1	27	1	2014-01-28	86	3216	1.09
1	28	1	2014-01-29	222	2994	0.99
1	29	1	2014-01-30	272	2723	0.99
1	30	1	2014-01-31	209	2614	0.99
2	31	2	2014-02-01	369	2148	0.99
2	32	2	2014-02-02	217	1928	0.99
2	33	2	2014-02-03	97	1831	0.99
2	34	2	2014-02-04	117	1714	0.99
2	35	2	2014-02-05	100	1998	1.29
2	36	2	2014-02-06	64	2126	1.29
2	37	2	2014-02-07	85	2091	1.29
2	38	2	2014-02-08	64	2037	1.29
2	39	2	2014-02-09	85	1982	1.29
2	40	2	2014-02-12	8	7228	1.29
2	41	2	2014-02-13	43	7185	1.09
2	42	2	2014-02-14	107	7078	1.09

Properties

General Navigation paths

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: Description

Comments: Comments

Screen tip: Screen tip

Members display

Display options: Show members

Sort members by: year

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

# Retail Store Stock Inventory Analytics

The screenshot shows the IBM Cognos Analytics interface with a data grid. The 'Data format' dialog is open for the 'sales' column. The dialog has a 'Format type' dropdown set to 'Number'. The 'Number of decimal places' is set to 0. 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' is set to 'empty'. The 'Advanced options' button is visible. The background data grid shows columns: M\_Date, Row Id, year, sales, Stock, Price. The 'sales' column contains values like 70, 4092, 5.59, etc.

M_Date	Row Id	year	sales	Stock	Price
1/23/14	1	20	70	4092	5.59
1/23/14	1	21			
1/23/14	1	22			
1/23/14	1	23			
1/23/14	1	24			
1/23/14	1	25			
1/23/14	1	26			
1/23/14	1	27			
1/23/14	1	28			
1/23/14	1	29			
1/23/14	1	30			
1/23/14	2	31			
1/23/14	2	32			
1/23/14	2	33			
1/23/14	2	34			
1/23/14	2	35			
1/23/14	2	36			
1/23/14	2	37			
2/6/14	2	38	64	2037	1.29
2/9/14	2	39	86	1982	1.29
2/12/14	2	40	8	7228	1.29
2/13/14	2	41	43	7186	1.09
2/14/14	2	42	107	7078	1.09

The screenshot shows the IBM Cognos Analytics interface with a data grid. The 'Data format' dialog is open for the 'Stock' column. The dialog has a 'Format type' dropdown set to 'Number'. The 'Number of decimal places' is set to 0. 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' is set to 'empty'. The 'Advanced options' button is visible. The background data grid shows columns: M\_Date, Row Id, year, sales, Stock, Price. The 'Stock' column contains values like 70, 4092, 5.59, etc.

M_Date	Row Id	year	sales	Stock	Price
1/23/14	1	20	70	4092	5.59
1/23/14	1	21			
1/23/14	1	22			
1/23/14	1	23			
1/23/14	1	24			
1/23/14	1	25			
1/23/14	1	26			
1/23/14	1	27			
1/23/14	1	28			
1/23/14	1	29			
1/23/14	1	30			
1/23/14	2	31			
1/23/14	2	32			
1/23/14	2	33			
1/23/14	2	34			
1/23/14	2	35			
1/23/14	2	36			
1/23/14	2	37			
2/6/14	2	38	64	2037	1.29
2/9/14	2	39	86	1982	1.29
2/12/14	2	40	8	7228	1.29
2/13/14	2	41	43	7186	1.09
2/14/14	2	42	107	7078	1.09



# Retail Store Stock Inventory Analytics

The screenshot displays the IBM Cognos Analytics web application. The main interface shows a data table with columns: T1, M\_Date, Row Id, year, sales, Stock, and Price. The 'Price' column is selected, and a 'Data format' dialog box is open, allowing configuration of the column's format. The dialog box includes options for 'Format type' (set to Number), '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). The 'Advanced options' button is visible at the bottom of the dialog. The background table shows data for various dates and prices.

T1	M_Date	Row Id	year	sales	Stock	Price
1	20	1	2/23/14	70	4091	1.59
1	21	1				
1	22	1				
1	23	1				
1	24	1				
1	25	1				
1	26	1				
1	27	1				
1	28	1				
1	29	1				
1	30	1				
2	31	2				
2	32	2				
2	33	2				
2	34	2				
2	35	2				
2	36	2				
2	37	2				
2	38	2	2/6/14	64	2037	1.29
2	39	2	2/9/14	66	1982	1.29
2	40	2	2/12/14	8	7228	1.29
2	41	2	2/13/14	43	7186	1.09
2	42	2	2/14/14	107	7078	1.09

# Retail Store Stock Inventory Analytics

The screenshot shows the IBM Cognos Analytics interface. The main window displays a data module grid with columns: T1, M\_Date, Row Id, year, sales, Stock, and Price. The 'Price' column is selected. A 'Save as' dialog box is open, showing the 'Name' field with 'Inventory cleaned data set' and the 'Selected destination' as 'My content'. The dialog also shows a list of existing content items.

Name	Type	Last Accessed
data modules	Folder	9/23/2022, 3:34 AM
my analytics story	Folder	9/23/2022, 4:47 AM
RETAIL STORE STOCK INVENTORY	Folder	11/4/2022, 3:33 AM
sample	Folder	9/23/2022, 1:30 AM
80_Startups.csv	Uploaded file	9/13/2022, 1:53 AM
assignment 1	Exploration	9/16/2022, 1:34 AM
bank (1).csv	Uploaded file	9/16/2022, 11:38 PM
bielbuyer.csv	Uploaded file	9/14/2022, 9:03 AM
Inventory	Prediction	11/11/2022, 4:47 AM

The screenshot shows the IBM Cognos Analytics interface. The main window displays a data module grid with columns: T1, M\_Date, Row Id, year, sales, Stock, and Price. The 'Price' column is selected. A 'Save as' dialog box is open, showing the 'Name' field with 'Inventory cleaned data set' and the 'Selected destination' as 'RETAIL STORE STOCK INVENTORY'. The dialog also shows a list of existing content items.

Name	Type	Last Accessed
Inventory cleaned data set	Data module	11/4/2022, 3:33 AM