

# Project Development Phase

## SPRINT-1

Team ID	PNT2022TMID26445
Project Name	Project – Retail Store Stock Inventory Analytics

### SPRINT-1:

Data Collection

Data Preparation

### DATA COLLECTION:

#### 1. Download the dataset

Dataset link –

[https://drive.google.com/drive/folders/1o4BfwwR0A58IV-YhvhyIDl4pImLeI2C6?usp=share\\_link](https://drive.google.com/drive/folders/1o4BfwwR0A58IV-YhvhyIDl4pImLeI2C6?usp=share_link)

Inventory Analysis.csv - Excel

File Home Insert Draw Page Layout Formulas Data Review View Help Tell me what you want to do

Clipboard Font Alignment Number Styles Cells Editing

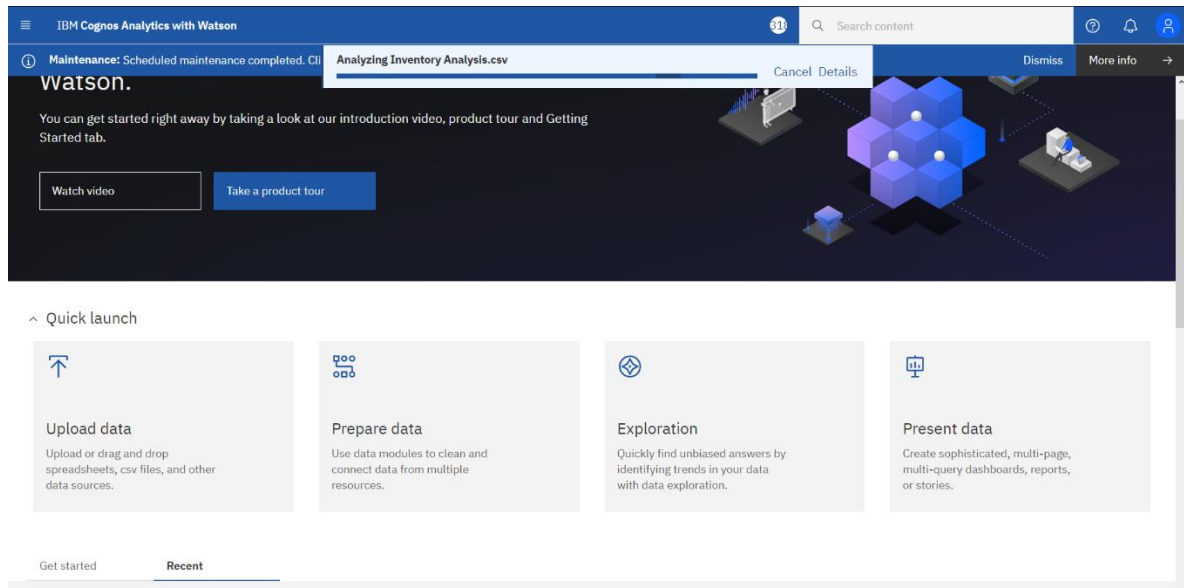
Format: Change the row height or column width, organize sheets, or protect or hide cells.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	U	V	W
1	Date	Sale	Inventory	Price																
2	01-01-2014	0	4972	108																
3	02-01-2014	70	4902	108																
4	03-01-2014	59	4843	108																
5	04-01-2014	93	4750	108																
6	05-01-2014	96	4654	108																
7	06-01-2014	145	4509	108																
8	07-01-2014	179	4329	108																
9	08-01-2014	321	4104	108																
10	09-01-2014	125	4459	91																
11	10-01-2014	88	5043	91																
12	11-01-2014	188	5239	91																
13	12-01-2014	121	5118	91																
14	13-01-2014	134	4984	91																
15	14-01-2014	80	4904	91																
16	15-01-2014	82	4822	91																
17	16-01-2014	94	4728	99																
18	18-01-2014	159	4464	99																
19	19-01-2014	199	4265	99																
20	20-01-2014	104	4161	99																
21	21-01-2014	70	4091	99																
22	22-01-2014	127	3964	91																
23	23-01-2014	96	3868	91																
24	24-01-2014	75	3793	91																
25	25-01-2014	198	3595	91																
26	26-01-2014	168	3427	91																
27	27-01-2014	125	3302	91																
28	28-01-2014	86	3216	91																
29	29-01-2014	77	3094	92																

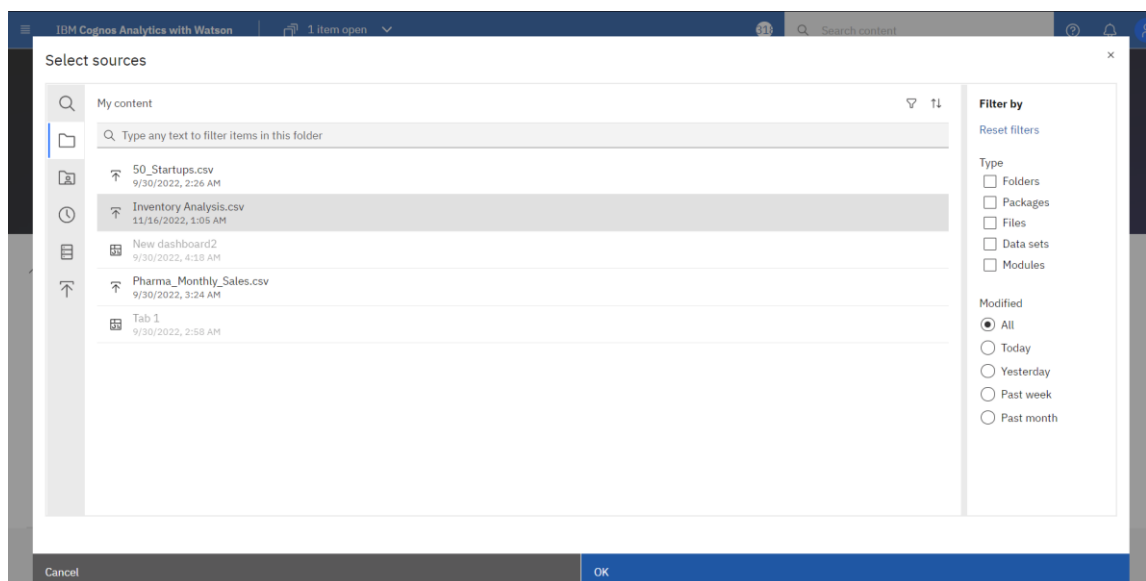
Ready 30°C Haze Accessibility: Unavailable ENG IN 01:56 PM 16-11-2022

## 2. Loading the dataset

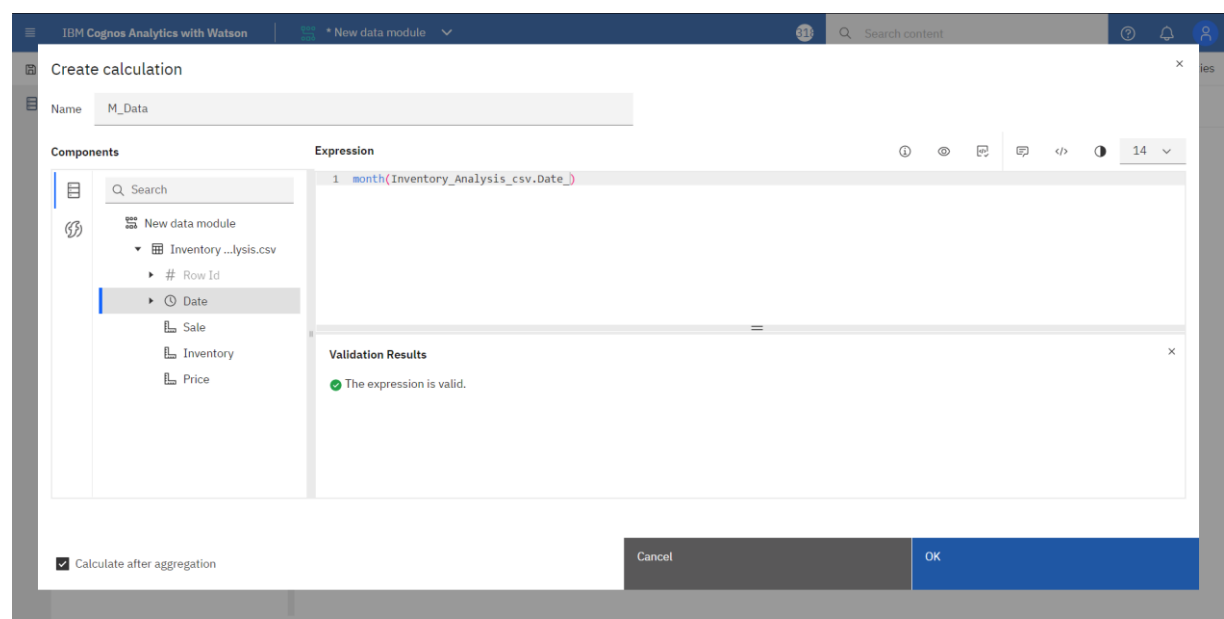
Tool Used – IBM Cognos Analytics



## DATA PREPERATION :



# Month Data:



Data module							
Grid							
Revenue	Month_data	Row Id	Date	Sale	Inventory	Price	
0	1	1	2014-01-01	0	4972	108	
7560	1	2	2014-01-02	70	4902	108	
6372	1	3	2014-01-03	59	4843	108	
10044	1	4	2014-01-04	93	4750	108	
10368	1	5	2014-01-05	96	4654	108	
15660	1	6	2014-01-06	145	4509	108	
19332	1	7	2014-01-07	179	4329	108	
34668	1	8	2014-01-08	321	4104	108	
11375	1	9	2014-01-09	125	4459	91	
8008	1	10	2014-01-10	88	5043	91	
17108	1	11	2014-01-11	188	5239	91	
11011	1	12	2014-01-12	121	5118	91	
12194	1	13	2014-01-13	134	4984	91	
7280	1	14	2014-01-14	80	4904	91	

Revenue Data:

IBM Cognos Analytics with Watson

New data module

Search content

11

?

🔔

👤

Create calculation

Name

Revenue

Components

Expression

🔍 Search

Inventory Analysis.csv

# Month\_data

# Row Id

🕒 Date

📄 Sale

Inventory

Price

🕒 Date1

1

Sale\*Price

Validation Results

🟢 The expression is valid.

☐ Calculate after aggregation

Cancel

OK

IBM Cognos Analytics with Watson

New data module

Search content

11

?

🔔

👤

🔍 Search

New data module

Navigation paths

Inventory Analysis.csv

Revenue

# Month\_data

# Row Id

🕒 Date

📄 Sale

Inventory

Price

🕒 Date1

Grid

Relationships

Custom tables

## Date Data:

The screenshot shows the IBM Cognos Analytics interface. The top navigation bar includes the logo, 'IBM Cognos Analytics with Watson', a dropdown menu for 'New data module', a search bar, and user profile icons. The left sidebar displays a 'Data module' tree with a search bar and a list of modules: 'New data module', 'Navigation paths', 'Inventory Analysis.csv', 'Revenue', 'Month\_data', 'Row Id', 'Date' (selected), 'Sale', 'Inventory', 'Price', and 'Date1'. The main area shows a 'Grid' view of the 'Date' module. The table has columns: Revenue, Month\_data, Row Id, Date, Sale, Inventory, and Price. The data represents daily sales from January 1, 2014, to January 14, 2014.

Revenue	Month_data	Row Id	Date	Sale	Inventory	Price
0	1	1	2014-01-01	0	4972	108
7560	1	2	2014-01-02	70	4902	108
6372	1	3	2014-01-03	59	4843	108
10044	1	4	2014-01-04	93	4750	108
10368	1	5	2014-01-05	96	4654	108
15660	1	6	2014-01-06	145	4509	108
19332	1	7	2014-01-07	179	4329	108
34668	1	8	2014-01-08	321	4104	108
11375	1	9	2014-01-09	125	4459	91
8008	1	10	2014-01-10	88	5043	91
17108	1	11	2014-01-11	188	5239	91
11011	1	12	2014-01-12	121	5118	91
12194	1	13	2014-01-13	134	4984	91
7280	1	14	2014-01-14	80	4904	91

## Sales Data:

The screenshot shows the IBM Cognos Analytics interface. The top navigation bar includes the logo, 'IBM Cognos Analytics with Watson', a dropdown menu for 'New data module', a search bar, and user profile icons. The left sidebar displays a 'Data module' tree with a search bar and a list of modules: 'New data module', 'Navigation paths', 'Inventory Analysis.csv', 'Revenue', 'Month\_data', 'Row Id', 'Date', 'Sale' (selected), 'Inventory', 'Price', and 'Date1'. The main area shows a 'Grid' view of the 'Sale' module. The table has columns: Revenue, Month\_data, Row Id, Date, Sale, Inventory, and Price. The data represents daily sales from January 1, 2014, to January 14, 2014.

Revenue	Month_data	Row Id	Date	Sale	Inventory	Price
0	1	1	2014-01-01	0	4972	108
7560	1	2	2014-01-02	70	4902	108
6372	1	3	2014-01-03	59	4843	108
10044	1	4	2014-01-04	93	4750	108
10368	1	5	2014-01-05	96	4654	108
15660	1	6	2014-01-06	145	4509	108
19332	1	7	2014-01-07	179	4329	108
34668	1	8	2014-01-08	321	4104	108
11375	1	9	2014-01-09	125	4459	91
8008	1	10	2014-01-10	88	5043	91
17108	1	11	2014-01-11	188	5239	91
11011	1	12	2014-01-12	121	5118	91
12194	1	13	2014-01-13	134	4984	91
7280	1	14	2014-01-14	80	4904	91

Inventory Data:

IBM Cognos Analytics with Watson

New data module

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Search content

Properties

Search

New data module

Navigation paths

Inventory Analysis.csv

Revenue

Month\_data

Row Id

Date

Sale

Inventory

Price

Date1

Grid

Relationships

Custom tables

Revenue	Month_data	Row Id	Date	Sale	Inventory	Price
0	1	1	2014-01-01	0	4972	108
7560	1	2	2014-01-02	70	4902	108
6372	1	3	2014-01-03	59	4843	108
10044	1	4	2014-01-04	93	4750	108
10368	1	5	2014-01-05	96	4654	108
15660	1	6	2014-01-06	145	4509	108
19332	1	7	2014-01-07	179	4329	108
34668	1	8	2014-01-08	321	4104	108
11375	1	9	2014-01-09	125	4459	91
8008	1	10	2014-01-10	88	5043	91
17108	1	11	2014-01-11	188	5239	91
11011	1	12	2014-01-12	121	5118	91
12194	1	13	2014-01-13	134	4984	91
7280	1	14	2014-01-14	80	4904	91

Price Data:

IBM Cognos Analytics with Watson

New data module

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Search content

Properties

Search

New data module

Navigation paths

Inventory Analysis.csv

Revenue

Month\_data

Row Id

Date

Sale

Inventory

Price

Date1

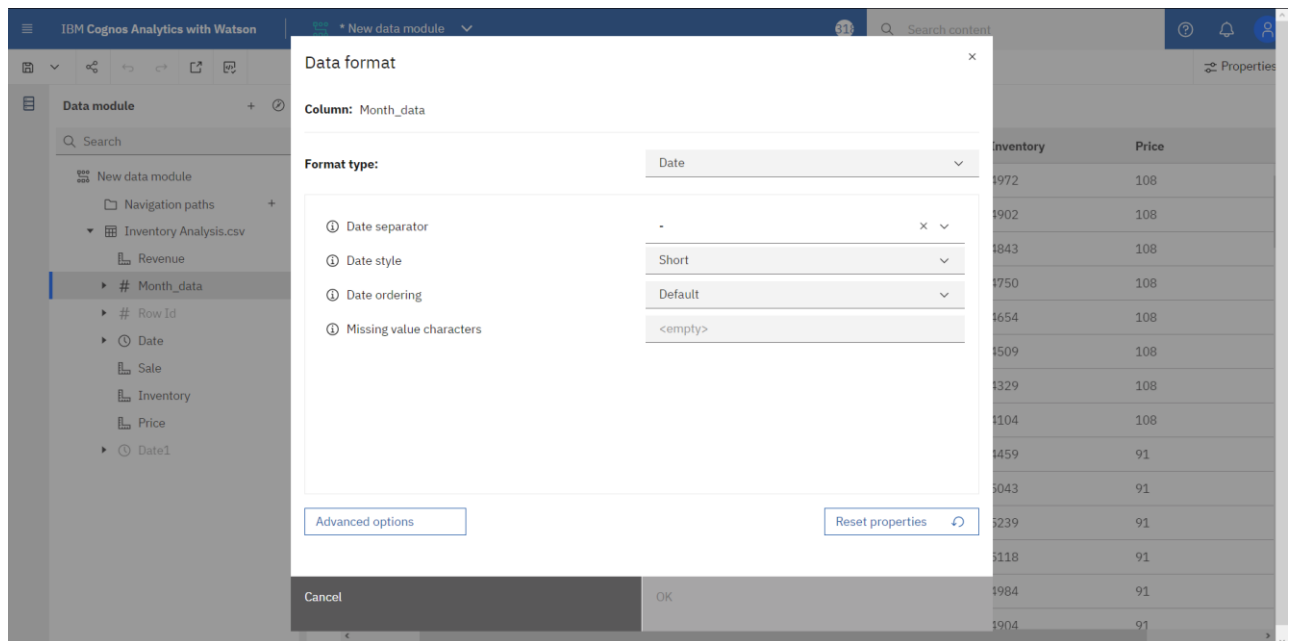
Grid

Relationships

Custom tables

Month_data	Row Id	Date	Sale	Inventory	Price
1	1	2014-01-01	0	4972	108
1	2	2014-01-02	70	4902	108
1	3	2014-01-03	59	4843	108
1	4	2014-01-04	93	4750	108
1	5	2014-01-05	96	4654	108
1	6	2014-01-06	145	4509	108
1	7	2014-01-07	179	4329	108
1	8	2014-01-08	321	4104	108
1	9	2014-01-09	125	4459	91
1	10	2014-01-10	88	5043	91
1	11	2014-01-11	188	5239	91
1	12	2014-01-12	121	5118	91
1	13	2014-01-13	134	4984	91
1	14	2014-01-14	80	4904	91

### Month Format Data:



IBM Cognos Analytics with Watson

New data module

11

Search content

Grid

Relationships

Custom tables

	Month_data	Row Id	Date	Sale	Inventory	Price
	1	1	2014-January-1	0	4972	108
	1	2	2014-January-2	70	4902	108
	1	3	2014-January-3	59	4843	108
	1	4	2014-January-4	93	4750	108
	1	5	2014-January-5	96	4654	108
	1	6	2014-January-6	145	4509	108
	1	7	2014-January-7	179	4329	108
	1	8	2014-January-8	321	4104	108
	1	9	2014-January-9	125	4459	91
	1	10	2014-January-10	88	5043	91
	1	11	2014-January-11	188	5239	91
	1	12	2014-January-12	121	5118	91
	1	13	2014-January-13	134	4984	91
	1	14	2014-January-14	80	4904	91

Data module

Search

New data module

Navigation paths

Inventory Analysis.csv

Revenue

# Month\_data

# Row Id

Date

Sale

Inventory

Price

Date1

Revenue Format Data:

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Search

New data module

Navigation paths

Inventory Analysis.csv

Revenue

Month\_data

Row Id

Date

Sale

Inventory

Price

Date1

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>

Advanced options

Reset properties

Cancel

OK

Inventory	Price
4972	108
4902	108
4843	108
4750	108
4654	108
4509	108
4329	108
4104	108
4459	91
5043	91
5239	91
5118	91
4984	91
4904	91

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Search

New data module

Navigation paths

Inventory Analysis.csv

Revenue

Month\_data

Row Id

Date

Sale

Inventory

Price

Date1

Grid

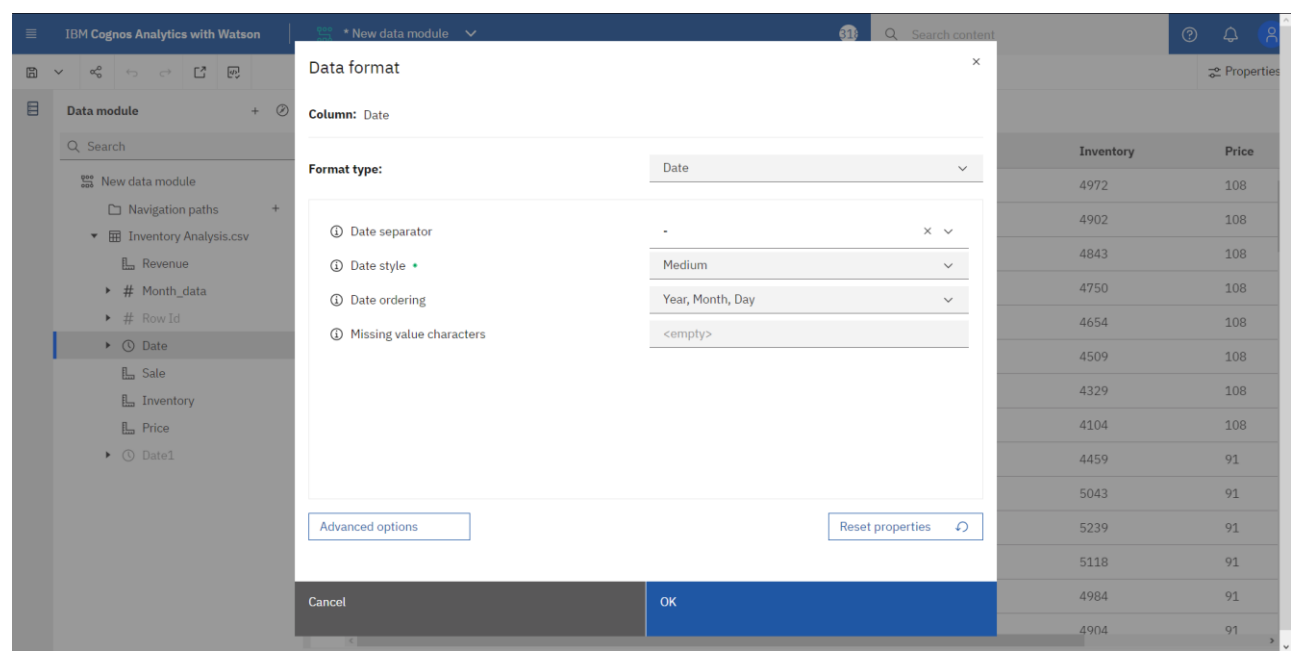
Relationships

Custom tables

	Revenue	Month_data	Row Id	Date	Sale	Inventory	Price
1	0	1	1	2014-January-1	0	4972	108
2	7560	1	2	2014-January-2	70	4902	108
3	6372	1	3	2014-January-3	59	4843	108
4	10044	1	4	2014-January-4	93	4750	108
5	10368	1	5	2014-January-5	96	4654	108
6	15660	1	6	2014-January-6	145	4509	108
7	19332	1	7	2014-January-7	179	4329	108
8	34668	1	8	2014-January-8	321	4104	108
9	11375	1	9	2014-January-9	125	4459	91
10	8008	1	10	2014-January-10	88	5043	91
11	17108	1	11	2014-January-11	188	5239	91
12	11011	1	12	2014-January-12	121	5118	91
13	12194	1	13	2014-January-13	134	4984	91
14	7280	1	14	2014-January-14	80	4904	91



Year Format Data:



The screenshot shows the 'Grid' view in IBM Cognos Analytics. The table has the following columns: Revenue, Month\_data, Row Id, Date, Sale, Inventory, and Price. The table contains 14 rows of data.

Revenue	Month_data	Row Id	Date	Sale	Inventory	Price
0	1	1	2014-Jan-1	0	4972	108
7560	1	2	2014-Jan-2	70	4902	108
6372	1	3	2014-Jan-3	59	4843	108
10044	1	4	2014-Jan-4	93	4750	108
10368	1	5	2014-Jan-5	96	4654	108
15660	1	6	2014-Jan-6	145	4509	108
19332	1	7	2014-Jan-7	179	4329	108
34668	1	8	2014-Jan-8	321	4104	108
11375	1	9	2014-Jan-9	125	4459	91
8008	1	10	2014-Jan-10	88	5043	91
17108	1	11	2014-Jan-11	188	5239	91
11011	1	12	2014-Jan-12	121	5118	91
12194	1	13	2014-Jan-13	134	4984	91
7280	1	14	2014-Jan-14	80	4904	91

Sales Format Data:

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Search

New data module

Navigation paths

Inventory Analysis.csv

Revenue

Month\_data

Row Id

Date

Sale

Inventory

Price

Date1

Column: Sale

Format type: Number

Number of decimal places: 0

Negative sign symbol: Default

Use thousands separator: No

Negative sign position: Default

Missing value characters: <empty>

Advanced options

Reset properties

Cancel

OK

Inventory	Price
4972	108
4902	108
4843	108
4750	108
4654	108
4509	108
4329	108
4104	108
4459	91
5043	91
5239	91
5118	91
4984	91
4904	91

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Search

New data module

Navigation paths

Inventory Analysis.csv

Revenue

Month\_data

Row Id

Date

Sale

Inventory

Price

Date1

Grid

Relationships

Custom tables

Revenue	Month_data	Row Id	Date	Sale	Inventory	Price
0	1	1	2014-Jan-1	0	4972	108
7560	1	2	2014-Jan-2	70	4902	108
6372	1	3	2014-Jan-3	59	4843	108
10044	1	4	2014-Jan-4	93	4750	108
10368	1	5	2014-Jan-5	96	4654	108
15660	1	6	2014-Jan-6	145	4509	108
19332	1	7	2014-Jan-7	179	4329	108
34668	1	8	2014-Jan-8	321	4104	108
11375	1	9	2014-Jan-9	125	4459	91
8008	1	10	2014-Jan-10	88	5043	91
17108	1	11	2014-Jan-11	188	5239	91
11011	1	12	2014-Jan-12	121	5118	91
12194	1	13	2014-Jan-13	134	4984	91
7280	1	14	2014-Jan-14	80	4904	91

# Inventory Format

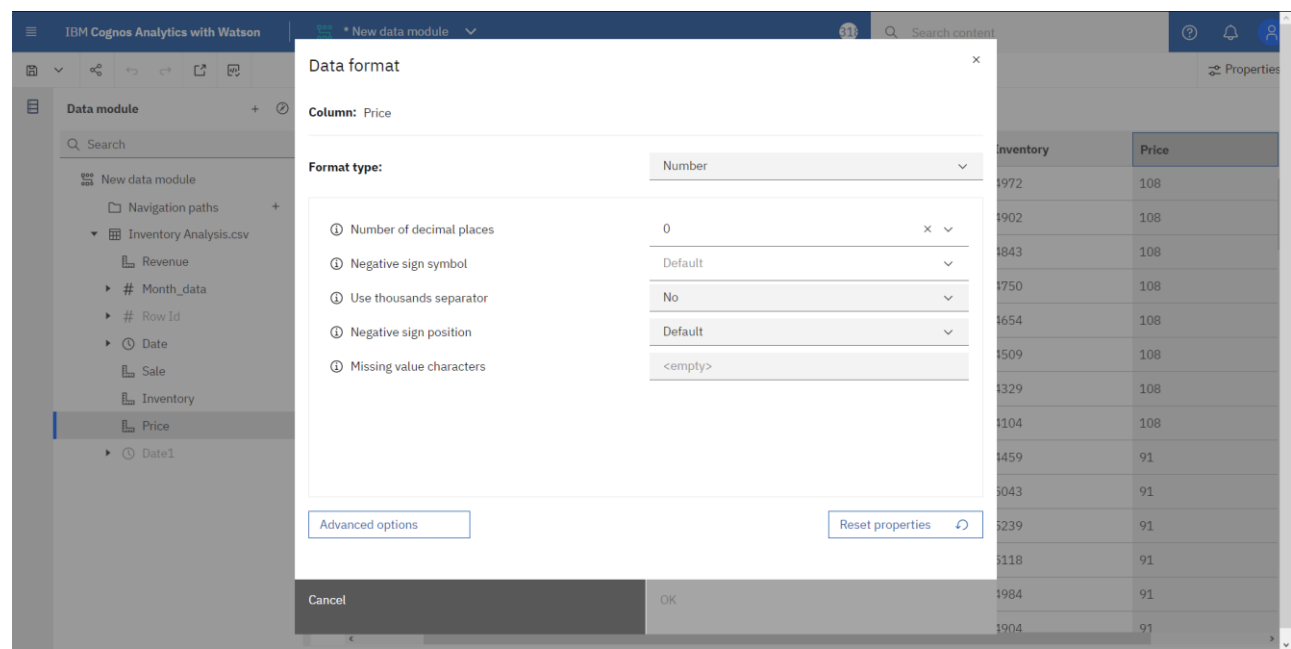
The screenshot shows the IBM Cognos Analytics interface with a 'Data format' dialog box open for the 'Inventory' column. The dialog box has a 'Format type' dropdown set to 'Number'. Below this, there are five settings: 'Number of decimal places' (0), 'Negative sign symbol' (Default), 'Use thousands separator' (No), 'Negative sign position' (Default), and 'Missing value characters' (<empty>). At the bottom of the dialog are 'Advanced options', 'Reset properties', 'Cancel', and 'OK' buttons.

Inventory	Price
4972	108
4902	108
4843	108
4750	108
4654	108
4509	108
4329	108
4104	108
4459	91
5043	91
5239	91
5118	91
4984	91
4904	91

The screenshot shows the IBM Cognos Analytics interface with a data grid view. The grid has columns: Revenue, Month\_data, Row Id, Date, Sale, Inventory, and Price. The data is sorted by Row Id in ascending order.

Revenue	Month_data	Row Id	Date	Sale	Inventory	Price
0	1	1	2014-Jan-1	0	4972	108
7560	1	2	2014-Jan-2	70	4902	108
6372	1	3	2014-Jan-3	59	4843	108
10044	1	4	2014-Jan-4	93	4750	108
10368	1	5	2014-Jan-5	96	4654	108
15660	1	6	2014-Jan-6	145	4509	108
19332	1	7	2014-Jan-7	179	4329	108
34668	1	8	2014-Jan-8	321	4104	108
11375	1	9	2014-Jan-9	125	4459	91
8008	1	10	2014-Jan-10	88	5043	91
17108	1	11	2014-Jan-11	188	5239	91
11011	1	12	2014-Jan-12	121	5118	91
12194	1	13	2014-Jan-13	134	4984	91
7280	1	14	2014-Jan-14	80	4904	91

Price Format Data:



The screenshot shows the IBM Cognos Analytics interface with the 'Grid' view selected. The table displays 14 rows of data with columns: 'Month\_data', 'Row Id', 'Date', 'Sale', 'Inventory', and 'Price'. The 'Price' column is highlighted in blue. The 'Month\_data' column contains values 1 through 14. The 'Date' column shows dates from 2014-Jan-1 to 2014-Jan-14. The 'Sale' column shows values from 0 to 134. The 'Inventory' column shows values from 4972 to 4904. The 'Price' column shows values 108 and 91.

Month_data	Row Id	Date	Sale	Inventory	Price
1	1	2014-Jan-1	0	4972	108
1	2	2014-Jan-2	70	4902	108
1	3	2014-Jan-3	59	4843	108
1	4	2014-Jan-4	93	4750	108
1	5	2014-Jan-5	96	4654	108
1	6	2014-Jan-6	145	4509	108
1	7	2014-Jan-7	179	4329	108
1	8	2014-Jan-8	321	4104	108
1	9	2014-Jan-9	125	4459	91
1	10	2014-Jan-10	88	5043	91
1	11	2014-Jan-11	188	5239	91
1	12	2014-Jan-12	121	5118	91
1	13	2014-Jan-13	134	4984	91
1	14	2014-Jan-14	80	4904	91

Month Data Properties:

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Search

New data module

Navigation paths

Inventory Analysis.csv

Revenue

# Month\_data

# Row Id

Date

Sale

Inventory

Price

Date1

Grid

Relationships

Custom tables

	Month_data	Row Id	Date	Sale
1	1	1	2014-Jan-1	0
	1	2	2014-Jan-2	70
	1	3	2014-Jan-3	59
	1	4	2014-Jan-4	93
	1	5	2014-Jan-5	96
	1	6	2014-Jan-6	145
	1	7	2014-Jan-7	179
	1	8	2014-Jan-8	321
	1	9	2014-Jan-9	125
	1	10	2014-Jan-10	88
	1	11	2014-Jan-11	188
	1	12	2014-Jan-12	121
	1	13	2014-Jan-13	134
	1	14	2014-Jan-14	80

Properties

General

Navigation paths

Label

Month\_data

Hide from users

Expression

View or edit

Usage

Attribute

Aggregate

Count Distinct

Data type

Integer

Represents

Default

Description

Comments

Revenue Data Properties:

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Search

New data module

Navigation paths

Inventory Analysis.csv

Revenue

# Month\_data

# Row Id

Date

Sale

Inventory

Price

Date1

Grid

Relationships

Custom tables

	Revenue	Month_data	Row Id	Date	Sale
0	1	1	2014-Jan-1	0	
7560	1	2	2014-Jan-2	70	
6372	1	3	2014-Jan-3	59	
10044	1	4	2014-Jan-4	93	
10368	1	5	2014-Jan-5	96	
15660	1	6	2014-Jan-6	145	
19332	1	7	2014-Jan-7	179	
34668	1	8	2014-Jan-8	321	
11375	1	9	2014-Jan-9	125	
8008	1	10	2014-Jan-10	88	
17108	1	11	2014-Jan-11	188	
11011	1	12	2014-Jan-12	121	
12194	1	13	2014-Jan-13	134	
7280	1	14	2014-Jan-14	80	

Properties

General

Navigation paths

Expression

View or edit

Usage

Measure

Calculate after aggregation

Aggregate

Total

Data type

Integer

Represents

Default

Lookup reference

None

Description

Comments

Date Data Format:

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Grid

Relationships

Custom tables

1↓

Date

Sale

Inventory

Price

2014-Jan-1	0	4972	108
2014-Jan-2	70	4902	108
2014-Jan-3	59	4843	108
2014-Jan-4	93	4750	108
2014-Jan-5	96	4654	108
2014-Jan-6	145	4509	108
2014-Jan-7	179	4329	108
2014-Jan-8	321	4104	108
2014-Jan-9	125	4459	91
2014-Jan-10	88	5043	91
2014-Jan-11	188	5239	91
2014-Jan-12	121	5118	91
2014-Jan-13	134	4984	91
2014-Jan-14	80	4904	91

Properties

General

Navigation paths

Label

Date

Hide from users

Expression

View or edit

Usage

Attribute

Aggregate

Count Distinct

Data type

Date

Represents

Default

Lookup reference

None

Description

Data module

Search

New data module

Navigation paths

Inventory Analysis.csv

Revenue

Month\_data

Row Id

Date

Sale

Inventory

Price

Date1

Sales Data Format:

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Grid

Relationships

Custom tables

1↓

Date

Sale

Inventory

Price

2014-Jan-1	0	4972	108
2014-Jan-2	70	4902	108
2014-Jan-3	59	4843	108
2014-Jan-4	93	4750	108
2014-Jan-5	96	4654	108
2014-Jan-6	145	4509	108
2014-Jan-7	179	4329	108
2014-Jan-8	321	4104	108
2014-Jan-9	125	4459	91
2014-Jan-10	88	5043	91
2014-Jan-11	188	5239	91
2014-Jan-12	121	5118	91
2014-Jan-13	134	4984	91
2014-Jan-14	80	4904	91

Properties

General

Label

Sale

Hide from users

Expression

View or edit

Usage

Measure

Aggregate

Total

Data type

Integer

Represents

Default

Lookup reference

None

Description

Data module

Search

New data module

Navigation paths

Inventory Analysis.csv

Revenue

Month\_data

Row Id

Date

Sale

Inventory

Price

Date1

## Inventory Data Properties:

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Grid

Relationships

Custom tables

Date	Sale	Inventory	Price
2014-Jan-1	0	4972	108
2014-Jan-2	70	4902	108
2014-Jan-3	59	4843	108
2014-Jan-4	93	4750	108
2014-Jan-5	96	4654	108
2014-Jan-6	145	4509	108
2014-Jan-7	179	4329	108
2014-Jan-8	321	4104	108
2014-Jan-9	125	4459	91
2014-Jan-10	88	5043	91
2014-Jan-11	188	5239	91
2014-Jan-12	121	5118	91
2014-Jan-13	134	4984	91
2014-Jan-14	80	4904	91

Properties

General

Label: Inventory

Hide from users: ☐

Expression: [View or edit](#)

Usage: Measure

Aggregate: Total

Data type: Integer

Represents:

Default:

Lookup reference: None

Description:

## Price Data Properties:

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Grid

Relationships

Custom tables

Date	Sale	Inventory	Price
2014-Jan-1	0	4972	108
2014-Jan-2	70	4902	108
2014-Jan-3	59	4843	108
2014-Jan-4	93	4750	108
2014-Jan-5	96	4654	108
2014-Jan-6	145	4509	108
2014-Jan-7	179	4329	108
2014-Jan-8	321	4104	108
2014-Jan-9	125	4459	91
2014-Jan-10	88	5043	91
2014-Jan-11	188	5239	91
2014-Jan-12	121	5118	91
2014-Jan-13	134	4984	91
2014-Jan-14	80	4904	91

Properties

General

Label: Price

Hide from users: ☐

Expression: [View or edit](#)

Usage: Measure

Aggregate: Total

Data type: Integer

Represents:

Default:

Lookup reference: None

Description: