

Project Development Phase

Sprint - 1

SPRINT-1

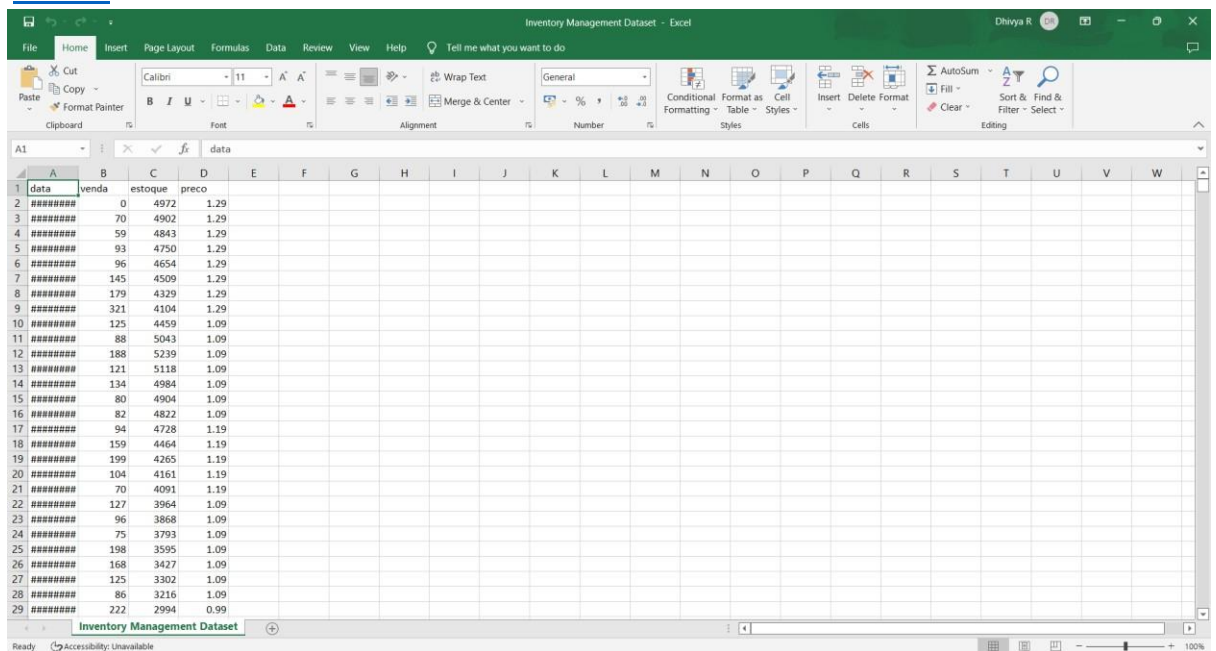
- Data Collection
- Data Preparation

Data Collection:

1. Download the Dataset

Dataset link -

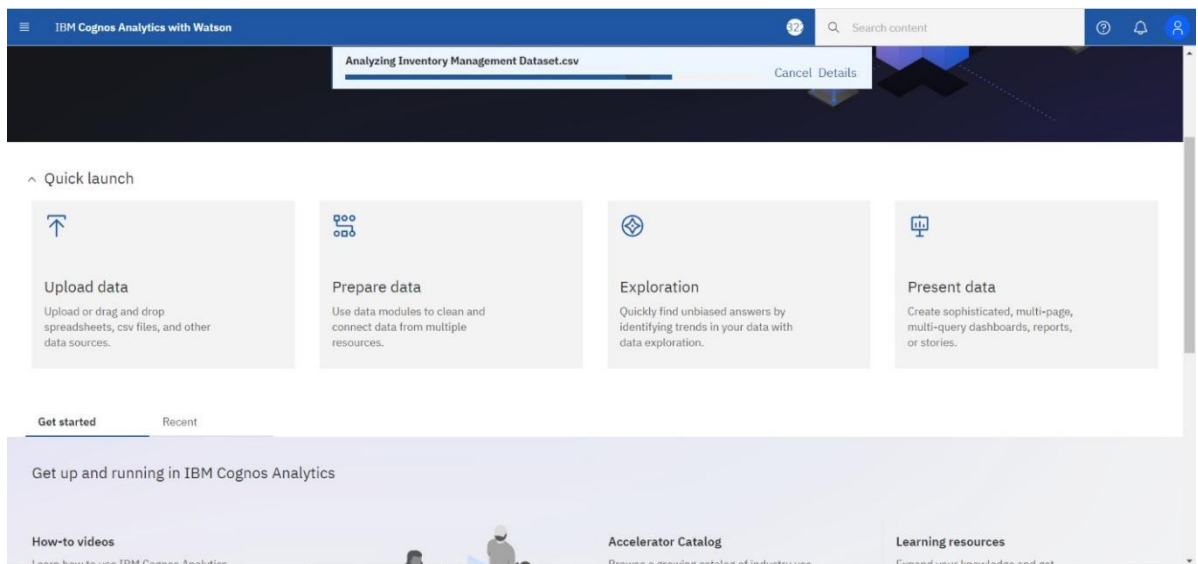
<https://drive.google.com/file/d/1awFIKJ9LiIdnNHwGLcsqNDbbwshFHR-w/view>



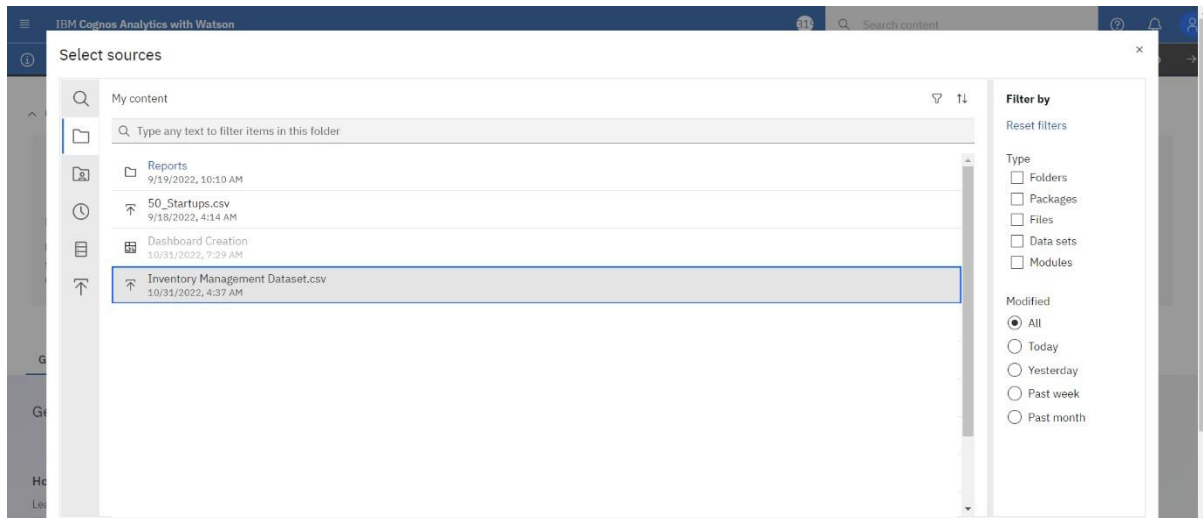
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	data	venda	estoque	preco																			
2	#####	0	4972	1.29																			
3	#####	70	4902	1.29																			
4	#####	59	4843	1.29																			
5	#####	93	4750	1.29																			
6	#####	96	4654	1.29																			
7	#####	145	4509	1.29																			
8	#####	179	4329	1.29																			
9	#####	321	4104	1.29																			
10	#####	125	4459	1.09																			
11	#####	88	5043	1.09																			
12	#####	188	5239	1.09																			
13	#####	121	5118	1.09																			
14	#####	134	4984	1.09																			
15	#####	80	4904	1.09																			
16	#####	82	4822	1.09																			
17	#####	94	4728	1.19																			
18	#####	159	4464	1.19																			
19	#####	199	4265	1.19																			
20	#####	104	4161	1.19																			
21	#####	70	4091	1.19																			
22	#####	127	3964	1.09																			
23	#####	96	3868	1.09																			
24	#####	75	3793	1.09																			
25	#####	198	3595	1.09																			
26	#####	168	3427	1.09																			
27	#####	125	3302	1.09																			
28	#####	86	3216	1.09																			
29	#####	222	2994	0.99																			

2. Load the Dataset

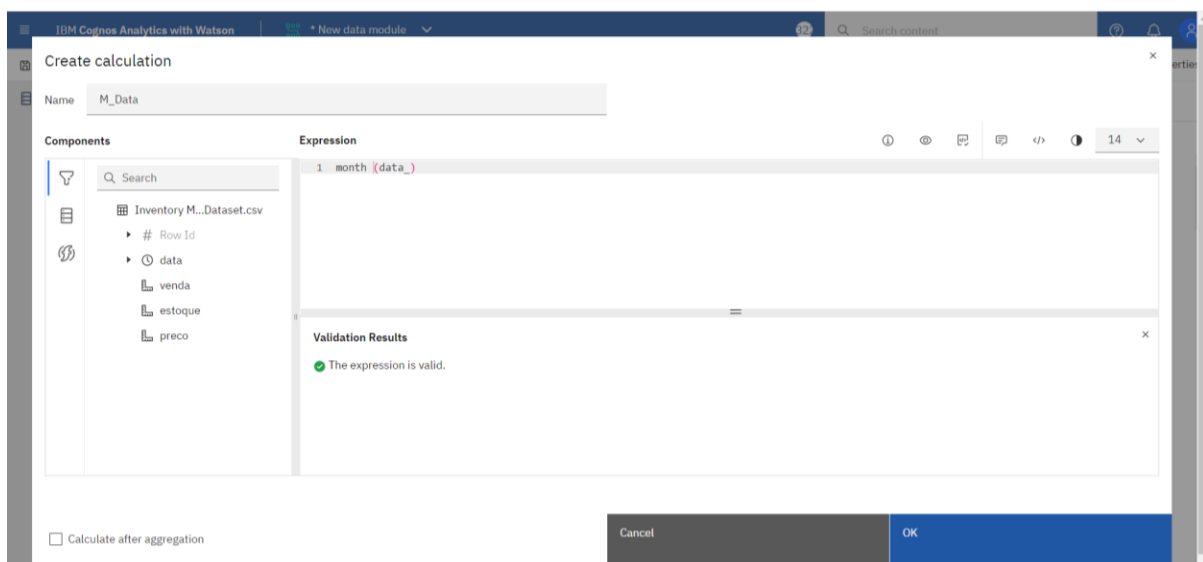
Tool Used: IBM Cognos



Data Preparation:



Month Data(M_Data):



The main interface of IBM Cognos Analytics with Watson shows the 'Grid' view of the 'M_Data' data module. The table displays 15 rows of data with columns for Row Id, Year, Sales, Stock, and Price.

Row Id	Year	Sales	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

Revenue Data:

Create calculation

Name

Revenue

Components

Search

Inventory M...Dataset.csv

- M_Data
- # Row Id
- Year
- Sales
- Stock
- Price

Expression

1 venda*preco

Validation Results

The expression is valid.

Calculate after aggregation

Cancel

OK

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Search

New data module

- Navigation paths
- Inventory M...ataset.csv
 - Revenue
 - M_Data
 - # Row Id
 - Year
 - Sales
 - Stock
 - Price

Grid

Relationships

Custom tables

Revenue	M_Data	Row Id	Year	Sales	Stock	Price
0	1	1	2014-01-01	0	4972	1.29
90.3	1	2	2014-01-02	70	4902	1.29
76.11	1	3	2014-01-03	59	4843	1.29
119.97	1	4	2014-01-04	93	4750	1.29
123.84	1	5	2014-01-05	96	4654	1.29
187.05	1	6	2014-01-06	145	4509	1.29
230.91	1	7	2014-01-07	179	4329	1.29
414.09000000000003	1	8	2014-01-08	321	4104	1.29
136.25	1	9	2014-01-09	125	4459	1.09
95.92	1	10	2014-01-10	88	5043	1.09
204.92000000000002	1	11	2014-01-11	188	5239	1.09
131.89000000000001	1	12	2014-01-12	121	5118	1.09
146.06	1	13	2014-01-13	134	4984	1.09
87.2	1	14	2014-01-14	80	4904	1.09
89.38000000000001	1	15	2014-01-15	82	4822	1.09

Year Data:

Year Data:

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Search

New data module

- Navigation paths
- Inventory M...ataset.csv
 - Revenue
 - M_Data
 - # Row Id
 - Year
 - Sales
 - Stock
 - Price

Grid

Relationships

Custom tables

Revenue	M_Data	Row Id	Year	Sales	Stock	Price
0	1	1	2014-01-01	0	4972	1.29
90.3	1	2	2014-01-02	70	4902	1.29
76.11	1	3	2014-01-03	59	4843	1.29
119.97	1	4	2014-01-04	93	4750	1.29
123.84	1	5	2014-01-05	96	4654	1.29
187.05	1	6	2014-01-06	145	4509	1.29
230.91	1	7	2014-01-07	179	4329	1.29
414.09000000000003	1	8	2014-01-08	321	4104	1.29
136.25	1	9	2014-01-09	125	4459	1.09
95.92	1	10	2014-01-10	88	5043	1.09
204.92000000000002	1	11	2014-01-11	188	5239	1.09
131.89000000000001	1	12	2014-01-12	121	5118	1.09
146.06	1	13	2014-01-13	134	4984	1.09
87.2	1	14	2014-01-14	80	4904	1.09
89.38000000000001	1	15	2014-01-15	82	4822	1.09

Stock Data:

IBM Cognos Analytics with Watson

New data module

11

Search content

?

Properties

Sales Data:

IBM Cognos Analytics with Watson

New data module

11

Search content

?

🔔

👤

🏠

⌵

🔍

↶

↷

🔗

📄

Data module

+

🕒

🔍 Search

New data module

📁 Navigation paths

📂 Inventory M...ataset.csv

📄 Revenue

▶ # M_Data

▶ # Row Id

▶ 🕒 Year

📄 Sales

📄 Stock

📄 Price

📄 Grid

🔗 Relationships

📄 Custom tables

11	Revenue	M_Data	Row Id	Year	Sales	Stock	Price
0	1	1	2014-01-01	0	4972	1.29	
90.3	1	2	2014-01-02	70	4902	1.29	
76.11	1	3	2014-01-03	59	4843	1.29	
119.97	1	4	2014-01-04	93	4750	1.29	
123.84	1	5	2014-01-05	96	4654	1.29	
187.05	1	6	2014-01-06	145	4509	1.29	
230.91	1	7	2014-01-07	179	4329	1.29	
414.09000000000003	1	8	2014-01-08	321	4104	1.29	
136.25	1	9	2014-01-09	125	4459	1.09	
95.92	1	10	2014-01-10	88	5043	1.09	
204.92000000000002	1	11	2014-01-11	188	5239	1.09	
131.89000000000001	1	12	2014-01-12	121	5118	1.09	
146.06	1	13	2014-01-13	134	4984	1.09	
87.2	1	14	2014-01-14	80	4904	1.09	
89.38000000000001	1	15	2014-01-15	82	4822	1.09	

Properties

Price Data:

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Grid Relationships Custom tables

	M_Data	Row Id	Year	Sales	Stock	Price
	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
	00000000003	1	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
	00000000002	1	2014-01-11	188	5239	1.09
	00000000001	1	2014-01-12	121	5118	1.09
	1	13	2014-01-13	134	4984	1.09
	1	14	2014-01-14	80	4904	1.09
	00000000001	1	2014-01-15	82	4822	1.09

Month Format Data:

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Grid Relationships Custom tables

Data format

Column: M_Data

Format type: Date

① Date separator: /

① Date style: Short

① Date ordering: Default

① Missing value characters: <empty>

Advanced options

Reset properties

Cancel OK

IBM Cognos Analytics with Watson

New data module

Search content

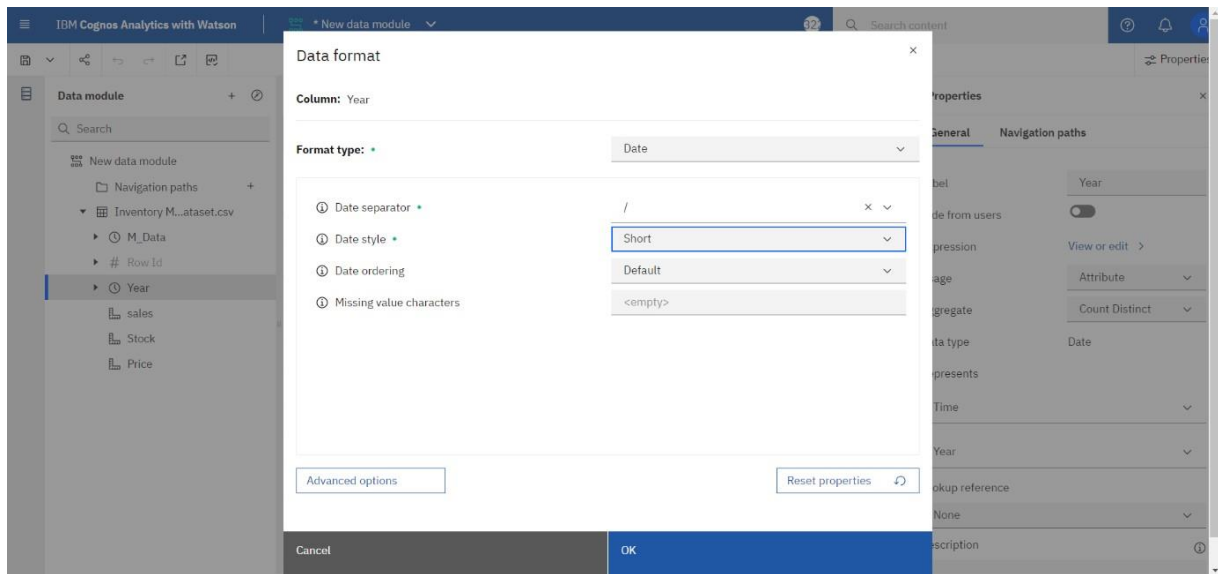
Properties

Data module

Grid Relationships Custom tables

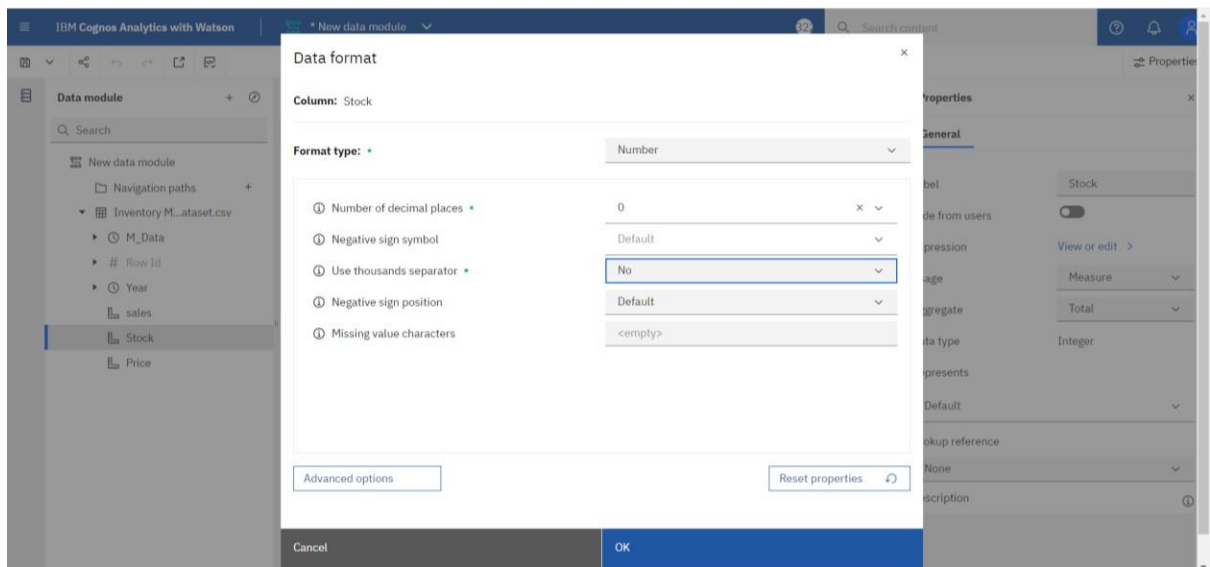
	Revenue	M_Data	Row Id	Year	sales	Stock	Price
	0	1	1	1/1/14	0	4972	1
	90.3	1	2	1/2/14	70	4902	1
	76.11	1	3	1/3/14	59	4843	1
	119.97	1	4	1/4/14	93	4750	1
	123.84	1	5	1/5/14	96	4654	1
	187.05	1	6	1/6/14	145	4509	1
	230.91	1	7	1/7/14	179	4329	1
	414.09000000000003	1	8	1/8/14	321	4104	1
	136.25	1	9	1/9/14	125	4459	1
	95.92	1	10	1/10/14	88	5043	1
	204.92000000000002	1	11	1/11/14	188	5239	1
	131.00000000000001	1	12	1/12/14	121	5118	1

Year Format Data:



Revenue	M_Data	Row Id	Year	sales	Stock	Price
0	1	1	1/1/14	0	4972	1
90.3	1	2	1/2/14	70	4902	1
76.11	1	3	1/3/14	59	4843	1
119.97	1	4	1/4/14	93	4750	1
123.84	1	5	1/5/14	96	4654	1
187.05	1	6	1/6/14	145	4509	1
230.91	1	7	1/7/14	179	4329	1
414.09000000000003	1	8	1/8/14	321	4104	1
136.25	1	9	1/9/14	125	4459	1
95.92	1	10	1/10/14	88	5043	1
204.92000000000002	1	11	1/11/14	188	5239	1
131.00000000000001	1	12	1/12/14	131	5110	1

Stock Format Data:



IBM Cognos Analytics with Watson | * New data module | Search content | Properties

Data module

Grid Relationships Custom tables

Revenue	M_Data	Row Id	Year	sales	Stock	Price
0	1	1	1/1/14	0	4972	1
90.3	1	2	1/2/14	70	4902	1
76.11	1	3	1/3/14	59	4843	1
119.97	1	4	1/4/14	93	4750	1
123.84	1	5	1/5/14	96	4654	1
187.05	1	6	1/6/14	145	4509	1
230.91	1	7	1/7/14	179	4329	1
414.09000000000003	1	8	1/8/14	321	4104	1
136.25	1	9	1/9/14	125	4459	1
95.92	1	10	1/10/14	88	5043	1
204.92000000000002	1	11	1/11/14	188	5239	1
131.00000000000001	1	12	1/12/14	131	5110	1

Sales Format Data:

IBM Cognos Analytics with Watson | * New data module | Search content | Properties

Data module

Grid Relationships Custom tables

Data format

Column: sales

Format type: Number

① Number of decimal places: 0

① Negative sign symbol: Default

① Use thousands separator: No

① Negative sign position: Default

① Missing value characters: <empty>

Advanced options

Reset properties

Cancel OK

IBM Cognos Analytics with Watson | * New data module | Search content | Properties

Data module

Grid Relationships Custom tables

Revenue	M_Data	Row Id	Year	sales	Stock	Price
0	1	1	1/1/14	0	4972	1
90.3	1	2	1/2/14	70	4902	1
76.11	1	3	1/3/14	59	4843	1
119.97	1	4	1/4/14	93	4750	1
123.84	1	5	1/5/14	96	4654	1
187.05	1	6	1/6/14	145	4509	1
230.91	1	7	1/7/14	179	4329	1
414.09000000000003	1	8	1/8/14	321	4104	1
136.25	1	9	1/9/14	125	4459	1
95.92	1	10	1/10/14	88	5043	1
204.92000000000002	1	11	1/11/14	188	5239	1
131.00000000000001	1	12	1/12/14	131	5110	1

Price Format Data:

The screenshot shows the 'Data format' dialog box for the 'Price' column. The 'Format type' is set to 'Number'. The 'Number of decimal places' is 0. The 'Negative sign symbol' is 'Default'. The 'Use thousands separator' is 'No'. The 'Negative sign position' is 'Default'. The 'Missing value characters' are '<empty>'. There are buttons for 'Advanced options', 'Reset properties', 'Cancel', and 'OK'.

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>

Advanced options

Reset properties

Cancel OK

The screenshot shows the 'Data module' view with a table of data. The table has columns: M_Data, Row Id, Year, sales, Stock, and Price. The data is as follows:

M_Data	Row Id	Year	sales	Stock	Price
1	1	1/1/14	0	4972	1
1	2	1/2/14	70	4902	1
1	3	1/3/14	59	4843	1
1	4	1/4/14	93	4750	1
1	5	1/5/14	96	4654	1
1	6	1/6/14	145	4509	1
1	7	1/7/14	179	4329	1
0000000003	8	1/8/14	321	4104	1
1	9	1/9/14	125	4459	1
1	10	1/10/14	88	5043	1
0000000002	11	1/11/14	188	5239	1
0000000001	12	1/12/14	121	5110	1

Revenue Format Data:

The screenshot shows the 'Data format' dialog box for the 'Revenue' column. The 'Format type' is set to 'Number'. The 'Number of decimal places' is 0. The 'Negative sign symbol' is 'Default'. The 'Use thousands separator' is 'No'. The 'Negative sign position' is 'Default'. The 'Missing value characters' are '<empty>'. There are buttons for 'Advanced options', 'Reset properties', and 'OK'.

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

OK

Revenue	M_Data	Row Id	Year	Sales	Stock	Price
0	1	1	1/1/14	0	4972	1
90	1	2	1/2/14	70	4902	1
76	1	3	1/3/14	59	4843	1
120	1	4	1/4/14	93	4750	1
124	1	5	1/5/14	96	4654	1
187	1	6	1/6/14	145	4509	1
231	1	7	1/7/14	179	4329	1
414	1	8	1/8/14	321	4104	1
136	1	9	1/9/14	125	4459	1
96	1	10	1/10/14	88	5043	1
205	1	11	1/11/14	188	5239	1
132	1	12	1/12/14	121	5118	1
146	1	13	1/13/14	134	4984	1
87	1	14	1/14/14	80	4904	1
89	1	15	1/15/14	82	4822	1

Year Properties:

Revenue	M_Data	Row Id	Year	sales
0	1	1	1/1/14	0
90	1	2	1/2/14	70
76	1	3	1/3/14	59
120	1	4	1/4/14	93
124	1	5	1/5/14	96
187	1	6	1/6/14	145
231	1	7	1/7/14	179
414	1	8	1/8/14	321
136	1	9	1/9/14	125
96	1	10	1/10/14	88
205	1	11	1/11/14	188

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

Sales Properties:

M_Data	Row Id	Year	sales
1	1	1/1/14	0
1	2	1/2/14	70
1	3	1/3/14	59
1	4	1/4/14	93
1	5	1/5/14	96
1	6	1/6/14	145
1	7	1/7/14	179
1	8	1/8/14	321
1	9	1/9/14	125
1	10	1/10/14	88
1	11	1/11/14	188

Properties

General

Label: sales

Hide from users: ☐

Expression: [View or edit](#)

Usage: Measure

Aggregate: Total

Data type: Integer

Represents: Default

Lookup reference: None

Description: [i](#)

Stock Properties:

IBM Cognos Analytics with Watson | Inventory Module

Search content

Properties

Data module

Inventory Module

Navigation paths

Inventory M...ataset.csv

Revenue

M_Data

Row Id

Year

sales

Stock

Price

Grid

Row Id	Year	sales	Stock
1	1/1/14	0	4972
2	1/2/14	70	4902
3	1/3/14	59	4843
4	1/4/14	93	4750
5	1/5/14	96	4654
6	1/6/14	145	4509
7	1/7/14	179	4329
8	1/8/14	321	4104
9	1/9/14	125	4459
10	1/10/14	88	5043
11	1/11/14	188	5239

Relationships

Custom tables

Properties

General

Label

Stock

Hide from users

Expression

View or edit

Usage

Measure

Aggregate

Total

Data type

Integer

Represents

Default

Lookup reference

None

Description

Price Properties:

IBM Cognos Analytics with Watson | Inventory Module

Search content

Properties

Data module

Inventory Module

Navigation paths

Inventory M...ataset.csv

Revenue

M_Data

Row Id

Year

sales

Stock

Price

Grid

Year	sales	Stock	Price
1/1/14	0	4972	1
1/2/14	70	4902	1
1/3/14	59	4843	1
1/4/14	93	4750	1
1/5/14	96	4654	1
1/6/14	145	4509	1
1/7/14	179	4329	1
1/8/14	321	4104	1
1/9/14	125	4459	1
1/10/14	88	5043	1
1/11/14	188	5239	1

Relationships

Custom tables

Properties

General

Label

Price

Hide from users

Expression

View or edit

Usage

Measure

Aggregate

Total

Data type

Decimal

Represents

Default

Lookup reference

None

Description

Revenue Properties:

IBM Cognos Analytics with Watson | Inventory Module

Search content

Properties

Data module

Inventory Module

Navigation paths

Inventory M...ataset.csv

Revenue

M_Data

Row Id

Year

sales

Grid

Revenue	M_Data	Row Id	Year	sales
0	1	1	1/1/14	0
90	1	2	1/2/14	70
76	1	3	1/3/14	59
120	1	4	1/4/14	93
124	1	5	1/5/14	96
187	1	6	1/6/14	145
231	1	7	1/7/14	179
414	1	8	1/8/14	321
136	1	9	1/9/14	125
96	1	10	1/10/14	88
205	1	11	1/11/14	188

Relationships

Custom tables

Properties

General

Label

Revenue

Hide from users

Expression

View or edit

Usage

Measure

Calculate after aggregation

Aggregate

Total

Data type

Decimal

Represents

Default

Lookup reference

None

M_Data Properties:

The screenshot displays the IBM Cognos Analytics interface. On the left, the 'Data module' pane shows a tree structure with 'Inventory Module' expanded, containing 'Navigation paths', 'Inventory M...ataset.csv', 'Revenue', and 'M_Data' (highlighted). The main area shows a table with columns: Revenue, M_Data, Row Id, Year, and sales. The 'M_Data' column is highlighted. On the right, the 'Properties' pane is open, showing the 'General' tab for 'M_Data'. The properties include: Label (M_Data), Hide from users (toggle off), Expression (View or edit >), Usage (Attribute), Aggregate (Count Distinct), Data type (Integer), Represents (Time), Month (Month), and Description (empty).

Revenue	M_Data	Row Id	Year	sales
0	1	1	1/1/14	0
90	1	2	1/2/14	70
76	1	3	1/3/14	59
120	1	4	1/4/14	93
124	1	5	1/5/14	96
187	1	6	1/6/14	145
231	1	7	1/7/14	179
414	1	8	1/8/14	321
136	1	9	1/9/14	125
96	1	10	1/10/14	88
205	1	11	1/11/14	188
422	1	12	1/12/14	121

Prepared Data link:

https://us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.my_folders%2FInventory%2BModule