

## Project Development Phase

### Delivery of Sprint-1

Date	29 October 2022
Team ID	PNT2022TMID53200
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

## **Retail store stock inventory analytics**



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## Sprint-1:

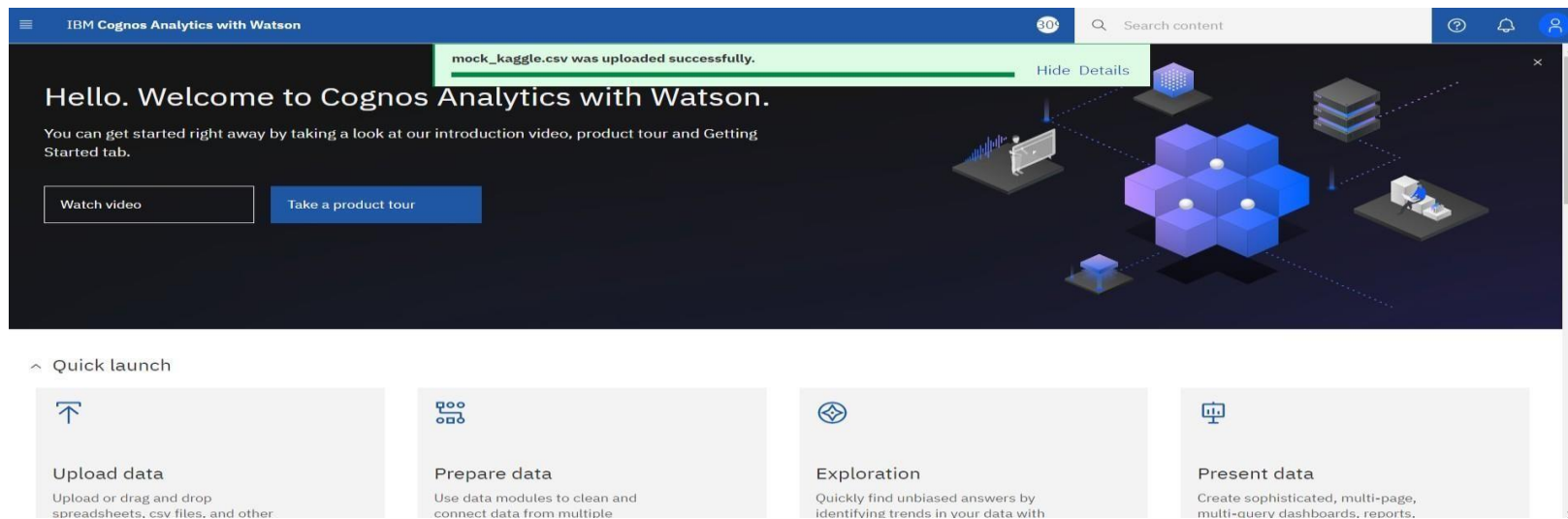
### Data Collection:

Download the Dataset

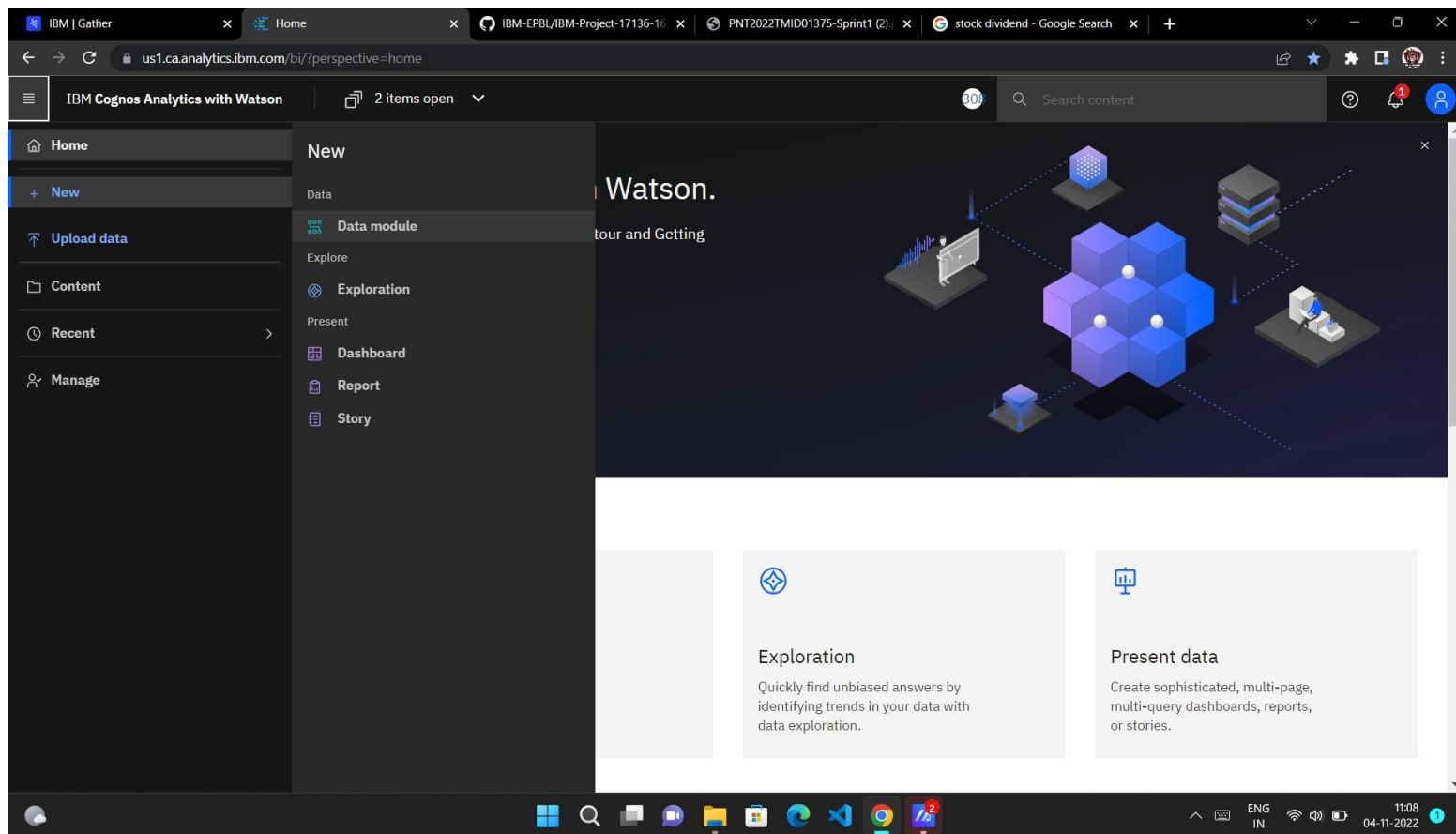
Dataset link - <https://drive.google.com/drive/folders/1kiL-5CHJmQvbk9VyFsuUs-myAupBZGNy>

### Load the Dataset:

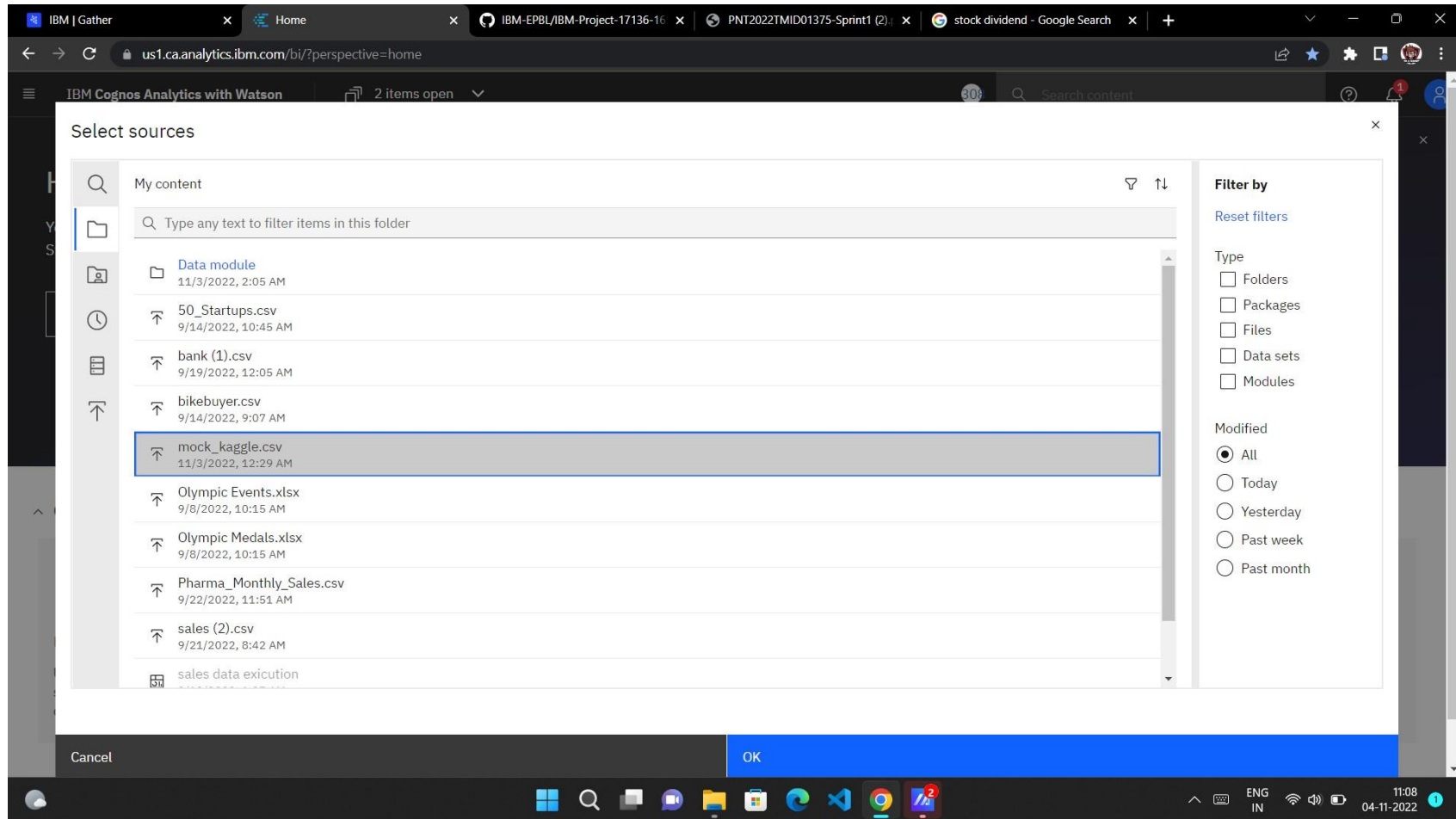
Tool used – IBM Cognos



## Data Module



## Mock\_kaggle.csv File



## Clean 0 values

The screenshot displays the IBM Cognos Analytics web interface. The browser address bar shows the URL: `us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=1074720901_e82f8aec582e4c7cb03e4f0de3b5b79e_sessionTemp&objRef=&tid=1074720901_e82f8aec582e4c7cb03e4f0de3b5b79e...`. The interface includes a top navigation bar with the IBM Cognos Analytics logo and a search bar. The main content area is divided into three sections: a left sidebar for the 'Data module', a central 'Grid' view, and a right 'Properties' panel.

The 'Data module' sidebar on the left shows a tree structure with the following items:

- New data module
- Navigation paths
- mock\_kaggle.csv
  - # Row Id
  - data (selected)
  - venda
  - estoque
  - preco

The central 'Grid' view displays a table with the following columns: Row Id, data, venda, estoque, and preco. The 'data' column is highlighted. The table contains 14 rows of data, with the first row having a 'venda' value of 0.

Row Id	data	venda	estoque	preco
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

The 'Properties' panel on the right shows the configuration for the selected 'data' column. The 'General' tab is active, displaying the following settings:

- Label: data
- Hide from users: ☐
- Expression: [View or edit >](#)
- Usage: Identifier
- Aggregate: Count Distinct
- Data type: Date
- Represents: Time
- Date: ☐
- Lookup reference: None
- Description:

The bottom of the screen shows a Windows taskbar with the date and time: 11:08, 04-11-2022.

IBM | Gather x \* New data module x IBM-EPBL/IBM-Project-17136-16 x PNT2022TMID01375-Sprint1 (2) x stock dividend - Google Search x +

us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=1074720901\_e82f8aec582e4c7cb03e4f0de3b5b79e\_sessionTemp&objRef=&tid=1074720901\_e82f8aec582e4c7cb03e4f0de3b5b79e...

IBM Cognos Analytics with Watson \* New data module 30% Search content ? 1

Data module +

Search

New data module

Navigation paths +

mock\_kaggle.csv

# Row Id

data

venda

estoque

preco

Grid Relationships Custom tables

Row Id	data	venda	estoque	preco
1			4972	1.29
2			4902	1.29
3			4843	1.29
4			4750	1.29
5			4654	1.29
6			4509	1.29
7			4329	1.29
8			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

Filter...  
Create navigation path...  
Split...  
Hide from users  
Remove  
Format data...  
Clean...  
Sort descending  
Sort ascending  
Properties

Properties

General Navigation paths

Label data

Hide from users

Expression View or edit >

Usage Identifier

Aggregate Count Distinct

Data type Date

Represents

Time

Date

Lookup reference None

Description

28°C Cloudy

ENG IN

11:09 04-11-2022

IBM | Gather x \* New data module x IBM-EPBL/IBM-Project-17136-16 x PNT2022TMID01375-Sprint1 (2). x stock dividend - Google Search x +

us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=1074720901\_e82f8aec582e4c7cb03e4f0de3b5b79e\_sessionTemp&objRef=&tid=1074720901\_e82f8aec582e4c7cb03e4f0de3b5b79...

IBM Cognos Analytics with Watson \* New data module Search content

### Edit calculation

Name

**Components**

Search

- mock\_kaggle.csv
  - # Row Id
  - data
- venda**
- estoque
- preco

**Expression**

1 venda

=

**Information**

Cancel OK

28°C Cloudy 11:09 04-11-2022



IBM | Gather

\* New data module

IBM-EPBL/IBM-Project-17136-16

PNT2022TMID01375-Sprint1 (2)

stock dividend - Google Search

+

us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=1074720901\_e82f8aec582e4c7cb03e4f0de3b5b79e\_sessionTemp&objRef=&tid=1074720901\_e82f8aec582e4c7cb03e4f0de3b5b79...

IBM Cognos Analytics with Watson

\* New data module

30

Search content

?

1

user icon

Edit calculation

Name

venda

Components

Expression

1

IF ( venda=0 ) THEN ( median ( venda ) ) ELSE ( venda )

Information

if ( condition ) then .... else ( expression ) , or case .... else ( expression ) end

Works with the if or case constructs. If the if condition or the case expression are not true, then the else expression is used. This function appears in the Top 10 Retailers for 2005 sample report in the GO Data Warehouse (analysis) package.

Cancel

OK

28°C Cloudy

Windows Taskbar

Search

File Explorer

Microsoft Edge

Visual Studio Code

Google Chrome

PowerShell

ENG IN

11:10

04-11-2022

Validation result:

The screenshot displays the 'Edit calculation' dialog in IBM Cognos Analytics. The 'Name' field is set to 'venda'. The 'Expression' field contains the following code:

```
1 IF ( venda=0 ) THEN ( median (venda ) ) ELSE ( venda )
```

The 'Components' panel on the left shows a search bar and a list of categories: Operators, Summaries, Constants, and Constructs. Under 'Constructs', the 'if then else' option is selected. Below this, there are checkboxes for 'in\_range', 'search case', and 'simple case'. Further down, there are links for 'Business Da... Functions', 'Period Predicates', and 'Vendor Spec... Functions'.

A 'Validation Results' pop-up window is displayed in the center, showing a green checkmark and the message: 'The expression is valid.'

At the bottom of the dialog, there are 'Cancel' and 'OK' buttons. The 'OK' button is highlighted in blue.

The background shows a Windows taskbar with the date '04-11-2022' and time '11:10'.

## Cleaned values

The screenshot displays the IBM Cognos Analytics interface. The main view is a data grid with columns: Row Id, price, stock, and stock divid. A context menu is open over the 'Row Id' column, showing options: Filter..., Create calculation..., Create data group..., Create navigation path..., Show to users, Remove, Format data..., Clean..., Sort descending, Sort ascending, and Properties. The 'Properties' panel on the right shows the 'Row Id' field details: Label (Row Id), Hide from users (checked), Expression (View or edit), Usage (Identifier), Aggregate (Count), Data type (Integer), Represents (Default), and Description (Represents the row number identifier, as originally found in the uploaded file.).

Row Id	price	stock	stock divid	
1	6	4972	1.29	
2	0	4902	1.29	
3	9	4843	1.29	
4	3	4750	1.29	
5	6	4654	1.29	
6	45	4509	1.29	
7	79	4329	1.29	
8	21	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

## Year Data

IBM Cognos Analytics with Watson sprint 1

us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=i064C14BB5D0C430099032F3BB6A29B97&objRef=i064C14BB5D0C430099032F3BB6A29B97&tid=1584271249\_87e6e2ef1e744b319...

Search content

Properties

Data module

Grid Relationships Custom tables

Search

sprint 1

Navigation paths

mock\_kaggle.csv

# Row Id

year

price

stock

stock dividend

Row Id	year	price	stock	stock dividend
1	2014-01-01	76	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

28°C Cloudy

ENG IN

11:11 04-11-2022

## Price Data:

The screenshot displays the IBM Cognos Analytics web application. The browser's address bar shows the URL: `us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=i064C14BB5D0C430099032F3BB6A29B97&objRef=i064C14BB5D0C430099032F3BB6A29B97&tid=1584271249_87e6e2ef1e744b319...`. The application header includes the IBM Cognos Analytics with Watson logo, a 'sprint 1' dropdown, a search bar, and user profile icons. The left sidebar, titled 'Data module', contains a search bar and a tree view with the following structure:

- sprint 1
  - Navigation paths
  - mock\_kaggle.csv
    - # Row Id
    - year
    - price (selected)
    - stock
    - stock dividend

The main area shows a 'Grid' view of the data. The table has the following columns: Row Id, year, price, stock, and stock dividend. The data is as follows:

Row Id	year	price	stock	stock dividend
1	2014-01-01	76	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

The bottom of the screen shows a Windows taskbar with the date and time set to 11:11 on 04-11-2022, and the system language set to ENG IN.

## Stock Data

The screenshot displays the IBM Cognos Analytics with Watson interface. The browser tabs at the top include 'IBM | Gather', 'sprint 1', 'IBM-EPBL/IBM-Project-17136-16', 'PNT2022TMID01375-Sprint1 (2)', and 'stock dividend - Google Search'. The URL bar shows a long alphanumeric string. The application header includes the IBM Cognos Analytics with Watson logo, a 'sprint 1' dropdown, a search bar, and user profile icons.

The main content area is titled 'Data module' and features a search bar. Below it, a tree view shows the hierarchy: 'sprint 1' > 'Navigation paths' > 'mock\_kaggle.csv' > '# Row Id' > 'year' > 'price' > 'stock' (selected) > 'stock dividend'. The 'stock' column is highlighted in the table below.

The table is titled 'Grid' and contains 14 rows of data. The columns are 'Row Id', 'year', 'price', 'stock', and 'stock dividend'. The data is as follows:

Row Id	year	price	stock	stock dividend
1	2014-01-01	76	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

The bottom of the screen shows a Windows taskbar with the date '04-11-2022' and time '11:11'.

## Stock Divided

The screenshot displays the IBM Cognos Analytics web application. The browser's address bar shows the URL: `us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=i064C14BB5D0C430099032F3BB6A29B97&objRef=i064C14BB5D0C430099032F3BB6A29B97&tid=1584271249_87e6e2ef1e744b319...`. The application header includes the text "IBM Cognos Analytics with Watson" and a "sprint 1" dropdown menu. On the left, a "Data module" sidebar lists a hierarchy: "sprint 1" > "Navigation paths" > "mock\_kaggle.csv" > "stock dividend", with the last item selected. The main area shows a "Grid" view of the "stock dividend" data. The table has six columns: "Row Id", "year", "price", "stock", and "stock dividend". It contains 14 rows of data, each representing a date from 2014-01-01 to 2014-01-14. The "stock dividend" values are 1.29 for the first 12 rows and 1.09 for the last two rows. The bottom of the screen shows a Windows taskbar with a weather widget (28°C Cloudy), various application icons, and a system tray with the date "04-11-2022" and time "11:11".

Row Id	year	price	stock	stock dividend
1	2014-01-01	76	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

## Calculation

The screenshot displays the IBM Cognos Analytics interface. A 'Create calculation' dialog box is open, allowing the user to define a new calculation. The dialog has the following fields and options:

- Name:** stock dividend +
- Expression:** stock dividend + Constant (with a red error icon and the text 'Enter a number' below it).
- Calculate after aggregation:** ☐
- Buttons:** Use calculation editor, Cancel, OK.

The background shows a data table with the following columns: Row Id, year, price, stock, and stock dividend. The data is as follows:

Row Id	year	price	stock	stock dividend
1				1.29
2				1.29
3				1.29
4				1.29
5				1.29
6				1.29
7				1.29
8				1.29
9				1.09
10				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



