

Date	05 November 2022
TEAM ID	PNT2022TMID53439
Project Name	Global Sales Analytics
Maximum Mark	4 marks

## Understanding Dataset

	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH
	Product Name	Sales	Quantity	Discount	Profit	Shipping Cost	Order Priority										
1	Plantronics CS510 - Over-the-Head mo	2309.65	7	0	762.1845	933.57	Critical										
2	Novimex Executive Leather Armchair, l	3709.395	9	0.1	-288.765	923.63	Critical										
3	Nokia Smart Phone, with Caller ID	5175.171	9	0.1	919.971	915.49	Medium										
4	Motorola Smart Phone, Cordless	2892.51	5	0.1	-96.54	910.16	Medium										
5	Sharp Wireless Fax, High-Speed	2832.96	8	0	311.52	903.04	Critical										
6	Samsung Smart Phone, with Caller ID	2862.675	5	0.1	763.275	897.35	Critical										
7	Novimex Executive Leather Armchair, r	1822.08	4	0	564.84	894.77	Critical										
8	Chromcraft Conference Table, Fully As	5244.84	6	0	996.48	878.38	High										
9	Fellowes PB500 Electric Punch Plastic C	5083.96	5	0.2	1906.485	867.69	Low										
10	Chromcraft Bull-Nose Wood Oval Con	4297.644	13	0.4	-1862.3124	865.74	Critical										
11	Martin Yale Chadless Opener Electric L	4164.05	5	0	83.281	846.54	High										
12	Bevis Conference Table, Fully Assembl	4626.15	5	0	647.55	835.57	High										
13	Cisco Smart Phone, with Caller ID	2616.96	4	0	1151.4	832.41	Critical										
14	Harbour Creations Executive Leather A	2221.8	7	0	622.02	810.25	Critical										
15	KitchenAid Microwave, White	3701.52	12	0	1026.08	804.54	Critical										
16	Breville Refrigerator, Red	1869.588	4	0.1	186.948	801.66	Critical										
17	Logitech diNovo Edge Keyboard	2249.91	9	0	517.4793	780.7	Critical										
18	Hoover Stove, Red	7958.58	14	0	3979.08	778.32	Low										
19	Brother Fax Machine, High-Speed	2565.594	9	0.1	28.404	766.93	Critical										
20	KitchenAid Stove, White	3409.74	6	0	818.28	763.38	High										
21	Hon Computer Table, with Bottom Sto	1977.72	4	0	276.84	759.47	Critical										
22	Apple iPhone 5S	2735.952	6	0.2	341.994	752.51	High										
23	SAICO Executive Leather Armchair, Blz	2754	6	0	358.02	752.47	Critical										
24	KitchenAid Refrigerator, Black	5273.7	10	0	1898.4	730.91	High										
25	Motorola Smart Phone, Full Size	1713.84	4	0	445.52	728.97	Critical										
26	Hon Computer Table, Fully Assembled	2106.496	8	0.2	526.496	728.39	Critical										
27	Lesro Conference Table, with Bottom	1715.16	2	0	720.36	725.57	Critical										
28	Hoover Stove, Red	3069.738	6	0.1	1364.238	725.34	Critical										

- The data is from 01-01-2011 to 31-12-2014
- There are no null values except for postal code column

## Loading the Dataset

The screenshot shows the IBM Cognos Analytics interface. At the top, there's a header bar with the text "IBM Cognos Analytics with Watson", a "Content" dropdown menu, a search bar, and user profile icons. Below the header, the "Content" section is active, with tabs for "My content", "Team content", and "Samples". A "New +" button is visible in the top right. The main area displays a table of content items with columns for Name, Type, and Last Accessed.

Name	Type	Last Accessed
<input type="checkbox"/> Global Sales	Dashboard	11/13/2022, 8:13 AM
<input type="checkbox"/> Global_Superstore2.csv <span>CSV</span>	Uploaded file	11/13/2022, 8:00 AM
<input type="checkbox"/> Organization sheets - Sheet1.csv <span>CSV</span>	Uploaded file	10/24/2022, 11:59 AM
<input type="checkbox"/> Organization sheets - Sheet3.csv <span>CSV</span>	Uploaded file	10/24/2022, 12:48 PM
<input type="checkbox"/> Organization sheets - Tickets.csv <span>CSV</span>	Uploaded file	10/25/2022, 4:47 AM
<input type="checkbox"/> Pharma data module	Data module	9/28/2022, 12:20 PM

## Preparing the Dataset

### 1. Create a Calculation called Order\_Year from Order Date

The screenshot shows the "Create calculation" dialog box. The "Name" field is set to "Calculation name". The "Components" panel on the left lists fields from the "Global\_Sup...tore2.csv" dataset, including Row ID, Order ID, Order Date, Ship Date, Ship Mode, Customer ID, Customer Name, Segment, and City. The "Expression" field contains the formula "1 Year{Order Date}". Below the expression field, there is an "Information" section. At the bottom, there is a checkbox for "Calculate after aggregation" and "Cancel" and "OK" buttons.

Calculate after aggregation ☐

Cancel OK

## 2. Create a Calculation called Order\_Month from Order Date

Create calculation ✕

Name

Components

Search

Global\_Sup...tore2.csv

- # Order\_Year
- # Row Id
- # Row ID
- Order ID
- Order Date**
- Ship Date
- Ship Mode
- Customer ID
- Custo... Name
- Segment

Expression

1 month (Order\_Date)

Information

**month ( date\_expression )**  
Returns the month (an integer from 1-12) from "date\_expression".  
**month ( 2005-11-01 ):**  
**Result:** Returns 11.

☐ Calculate after aggregation

Cancel

OK

## 3. Create a calculation called Order\_Day from Order Date

Create calculation ✕

Name

Components

Search

Global\_Sup...tore2.csv

- # Order\_Month
- # Order\_Year
- # Row Id
- # Row ID
- Order ID
- Order Date**
- Ship Date
- Ship Mode
- Customer ID
- Custo... Name

Expression

1 day (Order\_Date)

Information

**day ( date\_expression )**  
Returns the day of the month (1-31) from "date\_expression". "Date\_expression" can be a date value or a string representation of a date.  
**day ( '1998-01-08' ):**  
**Result:** Returns 8.

☐ Calculate after aggregation

Cancel

OK

#### 4. Create a Navigation containing the Order\_Year, Order\_Month, Order\_day

The screenshot shows the IBM Cognos Analytics with Watson interface. The top bar includes the title "IBM Cognos Analytics with Watson", a dropdown menu "New data module", a search bar, and a "Properties" button. The main area is divided into three tabs: "Grid", "Relationships", and "Custom tables". The "Grid" tab is active, displaying a table with columns: "All", "Order\_day", "Order\_Month", "Order\_Year", "Row Id", "Row ID", and "Order ID". The table contains 10 rows of data. On the left, a "Data module" sidebar is visible, showing a tree structure with "New data module" at the top, followed by "Navigation paths", "Order Date prep", "Global\_Su...fore2.csv", and "Order\_day". The "Order\_day" item is selected, and its sub-items "Order\_Month", "Order\_Year", "Row Id", "Row ID", "Order ID", "Order Date", and "Order Date" are listed below it.

All	Order_day	Order_Month	Order_Year	Row Id	Row ID	Order ID
All	31	7	2012	1	32298	CA-2012-12489
All	5	2	2013	2	26341	IN-2013-77876
All	17	10	2013	3	25330	IN-2013-71245
All	28	1	2013	4	13524	ES-2013-15790
All	5	11	2013	5	47221	SG-2013-4320
All	28	6	2013	6	22732	IN-2013-42360
All	7	11	2011	7	30570	IN-2011-81820
All	14	4	2012	8	31192	IN-2012-86365
All	14	10	2014	9	40155	CA-2014-13590
All	28	1	2012	10	40936	CA-2012-11660