

Project Development Phase Delivery of Sprint - 1

Date	29 October 2022
Team ID	PNT2022TMID32748
Project Name	Global Sales Data Analytics

Project Development Phase:

Sprint 1:

- Data Collection
- Data Filtration

Sprint 2:

- Data Visualization

Sprint 3:

- Dashboard Creation

Sprint 4:

- Report Creation
- Story Creation

Sprint -1:

1.Data Collection: When you want to provide a suitable solution to the given problem statement, you need to understand the dataset, load it to the cloud environment, and prepare it as per the technology requirement.

Downloading the Dataset:

link:<https://www.kaggle.com/apoorvaappz/global-super-store-data-set>

Understanding the Dataset: Once you download the Dataset, the rows you see are the details of the order done online by people across the globe in the time frame 1-jan-2011 to 31-dec-2014. There are no missing values in the majority of columns except postal code, you can drop it if not required.

FileHomeInsertPage LayoutFormulasDataReviewViewHelpTell me what you want to do

Paste

Calibri

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Wrap Text

General

Conditional Formatting

Format as Table

Cell Styles

Insert

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Format

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A Z

Sort & Find

Filter

Select

ClipboardFontAlignmentNumberStylesCellsEditing

A1

Row ID

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Row ID	Order ID	Order Dat	Ship Date	Ship Mode	Customer	Customer Segment	City	State	Country	Postal Coc	Market	Region	Product ID	Category	Sub-Categ	Product N	Sales	
32298	CA-2012-1	#####	#####	Same Day	RH-19495	Rick Hans	Consumer New York	New York	United Sta	10024 US		East	TEC-AC-1	Technolog	Accessorie	Plantronic	2309.65	
26341	IN-2013-7	#####	#####	Second Cl	JR-16210	Justin Ritt	Corporate Wollong	New South	Australia		APAC	Oceania	FUR-CH-1	Furniture	Chairs	Novimex E	3709.395	
25330	IN-2013-7	#####	#####	First Class	CR-12730	Craig Reitt	Consumer Brisbane	Queenslar	Australia		APAC	Oceania	TEC-PH-1	Technolog	Phones	Nokia Sm7	1575.171	
13524	ES-2013-1	#####	#####	First Class	KM-16375	Katherine Hom	Office Berlin	Berlin	Germany		EU	Central	TEC-PH-1	Technolog	Phones	Motorola	2892.51	
47221	SG-2013-4	#####	#####	Same Day	RH-9495	Rick Hans	Consumer Dakar	Dakar	Senegal		Africa	Africa	TEC-SHA-1	Technolog	Copiers	Sharp Wir	2832.96	
27232	IN-2013-4	#####	#####	Second Cl	JM-15655	Jim Mitc	Corporate Sydney	New South	Australia		APAC	Oceania	TEC-PH-1	Technolog	Phones	Samsung	2862.675	
30570	IN-2011-8	#####	#####	First Class	TS-21340	Toby Swin	Consumer Porirua	Wellington	New Zealand		APAC	Oceania	FUR-CH-1	Furniture	Chairs	Novimex E	1822.08	
31192	IN-2012-8	#####	#####	Standard	MB-18085	Mark Brow	Consumer Hamilton	Waikato	New Zealand		APAC	Oceania	FUR-TA-1	Furniture	Tables	Chromcar	5244.84	
40155	CA-2014-1	#####	#####	Standard	JW-15220	Jane Wacc	Corporate Sacramen	California	United Sta	95823 US		West	OFF-BI-10	Office Sup	Binders	Fellowes F	5083.96	
40936	CA-2012-1	#####	#####	Second Cl	JH-15985	Joseph Ho	Consumer Concord	North Car	United Sta	28027 US		South	FUR-TA-1	Furniture	Tables	Chromcar	4297.644	
34577	CA-2011-1	#####	#####	Second Cl	GM-14695	Greg Max	Corporate Alexandri	Virginia	United Sta	22804 US		South	OFF-SU-1	Office Sup	Supplies	Martin Yal	4164.05	
28879	ID-2012-1	#####	#####	First Class	AJ-10780	Anthony J	Corporate Kabul	Kabul	Afghanistan		APAC	Central As	FUR-TA-1	Furniture	Tables	Bevis Con	4626.15	
45794	SA-2011-2	#####	#####	Second Cl	MM-7260	Magdelen	Consumer Jizan	Jizan	Saudi Arabia		EMEA	EMEA	TEC-CIS-1	Technolog	Phones	Cisco Sma	2616.96	
4132	MX-2012-1	#####	#####	Same Day	VF-2115	Vicky Frey	Home Offi	Todolana	Brazil		LATAM	South	FUR-CH-1	Furniture	Chairs	Harbour C	2221.8	
27704	IN-2013-7	#####	#####	Second Cl	PF-19120	Peter Full	Consumer Mudanjar	Heilongjia	China		APAC	North Asia	OFF-AP-1	Office Sup	Appliance	KitchenAic	3701.52	
13779	ES-2014-5	#####	#####	Second Cl	BP-11185	Ben Peteri	Corporate Paris	Ille-de-Frai	France		EU	Central	OFF-AP-1	Office Sup	Appliance	Breville Re	1869.588	
36178	CA-2014-1	#####	#####	Second Cl	TB-21175	Thomas B	Corporate Henderson	Kentucky	United Sta	42420 US		South	TEC-AC-1	Technolog	Accessorie	Logitech d	2249.91	
12069	ES-2014-1	#####	#####	Standard	CP-18835	Patrick Kor	Corporate Prato	Tuscany	Italy		EU	South	OFF-AP-1	Office Sup	Appliance	Hoover St	7958.58	
22096	IN-2014-1	#####	#####	First Class	JS-15685	Jim Sink	Corporate Townsville	Queenslar	Australia		APAC	Oceania	TEC-PH-1	Technolog	Copiers	Brother F	2565.594	
49463	TZ-2014-8	#####	#####	Second Cl	RH-9555	Ritsa Hig	Consumer Uvina	Kigoma	Tanzania		Africa	Africa	OFF-KIT-1	Office Sup	Appliance	KitchenAic	3409.74	
46330	PL-2012-7	#####	#####	First Class	AB-600	Ann Blum	Corporate Bytom	Silesia	Poland		EMEA	EMEA	FUR-HON-	Furniture	Tables	Hon Comr	1977.72	

Global Superstore2

Loading the Dataset using IBM COGNOS ANALYTICS:

Before you can build a view and analyze your data, you must first connect the data to IBM Cognos. Cognos supports connecting to a wide variety of data, stored in a variety of places.

The data might be stored on your computer in a spreadsheet or a text file, or in a big data, relational, or cube (multidimensional) database on a server in your enterprise.

IBM Cognos Analytics with Watson

1 item open

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Search content

Upload data

Upload or drag and drop spreadsheets, csv files, and other data sources.

Prepare data

Use data modules to clean and connect data from multiple resources.

Exploration

Quickly find unbiased answers by identifying trends in your data with d...

Present data

Create sophisticated, multi-page, multi-query dashboards, reports, or st...

Get started

Recent

Name

Location

Type

Last Accessed

Global_Superstore_data preparation

My content

Uploaded file

05/11/2022, 01:31

Select sources



My content

Type any text to filter items in this folder

50_Startups.csv

14/09/2022, 09:17

Assignment_1

14/09/2022, 12:31

Assignment_2

29/09/2022, 07:28

global Sales dashboard

04/11/2022, 04:19

Global_Superstore_data preparation

03/11/2022, 11:32

Pharma_Monthly_Sales.csv

29/09/2022, 00:09

US Superstore data.xls

08/09/2022, 04:48

Filter by

[Reset filters](#)

Type

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Folders

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Packages

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Files

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Data sets

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Modules

Modified

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All

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Today

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Yesterday

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Past week

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Past month

2.Data Filtration:

Filtering the dataset and preparing by using data modules to clean and connect data from multiple modules.

IBM Cognos Analytics with Watson

New data module

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Search content

Properties

Data module

Search

New data module

Navigation paths

Global_Su...tore2.csv

Row Id

Row ID

abc Order ID

🕒 Order Date

🕒 Ship Date

abc Ship Mode

abc Customer ID

abc Customer Name

abc Segment

📍 City

📍 State

Grid

Relationships

Custom tables

↑↓	Row Id	Row ID	Order ID	Order Date	Ship Date	Ship
1	32298	CA-2012-124891	2012-07-31	2012-07-31	Se	
2	26341	IN-2013-77878	2013-02-05	2013-02-07	Se	
3	25330	IN-2013-71249	2013-10-17	2013-10-18	Fi	
4	13524	ES-2013-1579342	2013-01-28	2013-01-30	Fi	
5	47221	SG-2013-4320	2013-11-05	2013-11-06	Se	
6	22732	IN-2013-42360	2013-06-28	2013-07-01	Se	
7	30570	IN-2011-81826	2011-11-07	2011-11-09	Fi	
8	31192	IN-2012-86369	2012-04-14	2012-04-18	St	

Year Data:

Create calculation

Name	Calculation name
------	------------------

Components
Expression

Search

- Global_Sup...tore2.csv
 - # Row Id
 - # Row ID
 - abc Order ID
 - 🕒 Order Date**
 - 🕒 Ship Date
 - abc Ship Mode
 - abc Customer ID
 - abc Custo... Name
 - abc Segment
 - 📍 City

```
1 year (Order_Date)
```

Information
✖

year (date_expression)

Returns the year from "date_expression".

year (11 November 2005):
Result: Returns 2005.

IBM Cognos Analytics with Watson

New data module

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Search content

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Properties

Data module

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Search

New data module

Navigation paths

Global_Su...tore2.csv

Calculation name

Row Id

Row ID

abc Order ID

🕒 Order Date

🕒 Ship Date

abc Ship Mode

abc Customer ID

abc Customer Name

abc Segment

🔍

Grid

Relationships

Custom tables

	Calculation name	Row Id	Row ID	Order ID	Order Date	Ship
	2012	1	32298	CA-2012-124891	2012-07-31	20
	2013	2	26341	IN-2013-77878	2013-02-05	20
	2013	3	25330	IN-2013-71249	2013-10-17	20
	2013	4	13524	ES-2013-1579342	2013-01-28	20
	2013	5	47221	SG-2013-4320	2013-11-05	20
	2013	6	22732	IN-2013-42360	2013-06-28	20
	2011	7	30570	IN-2011-81826	2011-11-07	20
	2012	8	31192	IN-2012-86369	2012-04-14	20

Category and Sales data:

IBM Cognos Analytics with Watson

* New data module

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Search content

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Properties

Data module

🔍 Search

Country

Postal Code

Market

Region

Product ID

Category

Sub-Category

Product Name

Sales

Quantity

Discount

Profit

Shipping Cost

Order Priority

Grid

Relationships

Custom tables

Product ID	Category	Sub-Category	Product Name	Sales
FUR-BO-10004129	Furniture	Bookcases	Sauder Classic Bookcase, Pine	2624.04
FUR-TA-10000577	Furniture	Tables	Bretford CR4500 Series Slim Rectangular Table	1044.63
FUR-BO-10001372	Furniture	Bookcases	Safco Classic Bookcase, Pine	3076.5
FUR-CH-10003950	Furniture	Chairs	Novimex Executive Leather Armchair, Black	3709.395
FUR-CH-10001664	Furniture	Chairs	Novimex Swivel Stool, Black	1296.24
FUR-TA-10002958	Furniture	Tables	Chromcraft Conference Table, Fully Assembled	5244.84
FUR-TA-10000136	Furniture	Tables	Chromcraft Conference Table, Adjustable Height	2332.96
FUR-TA-10001889	Furniture	Tables	Bevis Conference Table, Fully Assembled	4626.15
FUR-BO-10002866	Furniture	Bookcases	Safco Classic Bookcase, Pine	1582.2
FUR-HON-10000224	Furniture	Tables	Hon Computer Table, with Bottom Storage	1977.72

Country data:

IBM Cognos Analytics with Watson

NEW 2025 * New data module

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Search content

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1

Properties

Data module

Search

Segment

City

State

Country

Postal Code

Market

Region

Product ID

Category

Sub-Category

Product Name

Sales

Quantity

Discount

Grid

Relationships

Custom tables

Segment	City	State	Country	2	Postal Code	Market
Corporate	Kabul	Kabul	Afghanistan		Null	APAC
Home Office	Kabul	Kabul	Afghanistan		Null	APAC
Corporate	Kabul	Kabul	Afghanistan		Null	APAC
Corporate	Kabul	Kabul	Afghanistan		Null	APAC
Consumer	Kabul	Kabul	Afghanistan		Null	APAC
Corporate	Kabul	Kabul	Afghanistan		Null	APAC
Home Office	Herat	Hirat	Afghanistan		Null	APAC
Consumer	Kabul	Kabul	Afghanistan		Null	APAC
Home Office	Herat	Hirat	Afghanistan		Null	APAC
Corporate	Kandahar	Kandahar	Afghanistan		Null	APAC

Order Priority:

IBM Cognos Analytics with Watson

New data module

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Search content

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Data module

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Search

Country

Postal Code

abc Market

Region

abc Product ID

abc Category

abc Sub-Category

abc Product Name

Sales

Quantity

Discount

Profit

Shipping Cost

abc Order Priority

Grid

Relationships

Custom tables

Quantity	Discount	Profit	Shipping Cost	Order Priority
5	0	647.55	835.57	High
5	0	848.7	185.01	Medium
7	0	356.58	106.41	High
3	0	564.48	73.63	Medium
6	0	45.9	58.04	High
1	0	34.71	50.01	High
2	0	102.42	39.66	Medium
2	0	59.34	36.24	Critical
4	0	79.68	11.01	Medium
3	0	15.75	9.39	Medium

Shipping Cost Format Data:

IBM Cognos Analytics with Watson

New data module

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Search content

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1

Data module

Search

Country

Postal Code

Market

Region

Product ID

Category

Sub-Category

Product Name

Sales

Quantity

Discount

Profit

Shipping Cost

Order Priority

Column: Shipping Cost

Format type: Currency

① Currency\$ (USD) - United States of America, dollar

① Currency symbolDefault

① Number of decimal placesDefault

① Use thousands separatorDefault

① Currency displayDefault

① Missing value characters<empty>

Advanced options

Reset properties

Order Priority

High

Medium

High

Medium

High

High

Medium

Critical

Medium

Medium

Shipping Cost Data:

Discount Data Format:

IBM Cognos Analytics with Watson

* New data module

Search content

Data module

Search

- Country
- Postal Code
- Market
- Region
- Product ID
- Category
- Sub-Category
- Product Name
- Sales
- Quantity
- Discount
- Profit
- Shipping Cost
- Order Priority

Data format

Column: Discount

Format type:

- Number of decimal places
- Use thousands separator
- Missing value characters

Percent

- Unformatted
- Text
- Number
- Percent
- Currency
- Date
- Date/Time
- Time
- Time interval
- Custom

Advanced options

Reset properties

Discount	3 ↓
0%	
0%	
0%	
0%	
0%	
0%	
0%	
0%	
0%	
0%	
0%	

Discount Data:

Data module		Grid	Relationships	Custom tables
Q Search		↕ ↗		
Country				
Postal Code				
abc Market				
Region				
abc Product ID				
abc Category				
abc Sub-Category				
abc Product Name				
Sales				
Quantity				
Discount				
Profit				
Shipping Cost				
abc Order Priority				

Sub-Category	Product Name	Sales	Quantity	Discount	3 ↓
Tables	Bevis Conference Table, Fully Assembled	4626.15	5	0%	
Bookcases	Bush Classic Bookcase, Pine	2070.15	5	0%	
Chairs	Hon Rocking Chair, Red	914.34	7	0%	
Tables	Chromcraft Wood Table, with Bottom Storage	1447.56	3	0%	
Chairs	Harbour Creations Chairmat, Black	417.42	6	0%	
Tables	Chromcraft Coffee Table, with Bottom Storage	267.09	1	0%	
Bookcases	Ikea Library with Doors, Mobile	731.82	2	0%	
Furnishings	Rubbermaid Frame, Black	219.78	2	0%	
Furnishings	Rubbermaid Door Stop, Ergonomic	169.68	4	0%	
Furnishings	Rubbermaid Door Stop,	131.58	3	0%	

Profit Data:

IBM Cognos Analytics with Watson

New data module

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Search content

1

Properties

Data module

Search

Country

Postal Code

abc Market

Region

abc Product ID

abc Category

abc Sub-Category

abc Product Name

Sales

Quantity

Discount

Profit

Shipping Cost

abc Order Priority

Grid

Relationships

Custom tables

↑	Time	Sales	Quantity	Discount	3 ↓	Profit	Shipping Cost
	Reference Table, labeled	4626.15	5	0%		647.55	\$835.57
	abc Bookcase,	2070.15	5	0%		848.7	\$185.01
	g Chair, Red	914.34	7	0%		356.58	\$106.41
	Wood Table, n Storage	1447.56	3	0%		564.48	\$73.63
	ations black	417.42	6	0%		45.9	\$58.04
	Coffee Bottom	267.09	1	0%		34.71	\$50.01
	/ with Doors,	731.82	2	0%		102.42	\$39.66
	d Frame,	219.78	2	0%		59.34	\$36.24
	d Door Stop,	169.68	4	0%		79.68	\$11.01
	d Door Stop,	131.58	3	0%		15.75	\$9.39

Region and Market Data:

IBM Cognos Analytics with Watson

New data module

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Search content

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Properties

Data module

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🕒

🔍 Search

Country

Postal Code

abc Market

Region

abc Product ID

abc Category

abc Sub-Category

abc Product Name

Sales

Quantity

Discount

Profit

Shipping Cost

abc Order Priority

Grid

Relationships

Custom tables

↕	Market	Region	Product ID	Category	1 ↗	Sub-Category	Prod
	APAC	Central Asia	FUR-TA-10001889	Furniture		Tables	Be
	APAC	Central Asia	FUR-BO-10002204	Furniture		Bookcases	Bl
	APAC	Central Asia	FUR-CH-10003965	Furniture		Chairs	Ho
	APAC	Central Asia	FUR-TA-10004892	Furniture		Tables	Ch
	APAC	Central Asia	FUR-CH-10002940	Furniture		Chairs	Ch
	APAC	Central Asia	FUR-TA-10000434	Furniture		Tables	Ch
	APAC	Central Asia	FUR-BO-10001255	Furniture		Bookcases	Ik
	APAC	Central Asia	FUR-FU-10000666	Furniture		Furnishings	Ru
	APAC	Central Asia	FUR-FU-10004064	Furniture		Furnishings	Ru
	APAC	Central Asia	FUR-FU-10002459	Furniture		Furnishings	Ru

Sales Data:

IBM Cognos Analytics with Watson

* New data module

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Search content

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Grid

Relationships

Custom tables

Sub-Category	Product Name	Sales	Quantity	Discount
Tables	Bevis Conference Table, Fully Assembled	4626.15	5	0%
Bookcases	Bush Classic Bookcase, Pine	2070.15	5	0%
Chairs	Hon Rocking Chair, Red	914.34	7	0%
Tables	Chromcraft Wood Table, with Bottom Storage	1447.56	3	0%
Chairs	Harbour Creations Chairmat, Black	417.42	6	0%
Tables	Chromcraft Coffee Table, with Bottom Storage	267.09	1	0%
Bookcases	Ikea Library with Doors, Mobile	731.82	2	0%
Furnishings	Rubbermaid Frame, Black	219.78	2	0%
Furnishings	Rubbermaid Door Stop, Ergonomic	169.68	4	0%
Furnishings	Rubbermaid Door Stop,	131.58	3	0%

Data module

Search

- Country
- Postal Code
- Market
- Region
- Product ID
- Category
- Sub-Category
- Product Name
- Sales**
- Quantity
- Discount
- Profit
- Shipping Cost
- Order Priority

Ship Mode Data:

IBM Cognos Analytics with Watson

New data module

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Search content

Properties

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Custom tables

Search

abc Order ID

abc Order Date

abc Ship Date

abc Ship Mode

abc Customer ID

abc Customer Name

abc Segment

City

State

Country

Postal Code

Market

Region

Product ID

Ship Mode	Customer ID	Customer Name	Segment	City	State
Same Day	RH-19495	Rick Hansen	Consumer	New York City	Ne
Second Class	JR-16210	Justin Ritter	Corporate	Wollongong	Ne
First Class	CR-12730	Craig Reiter	Consumer	Brisbane	Qu
First Class	KM-16375	Katherine Murray	Home Office	Berlin	Be
Same Day	RH-9495	Rick Hansen	Consumer	Dakar	Da
Second Class	JM-15655	Jim Mitchum	Corporate	Sydney	Ne
First Class	TS-21340	Toby Swindell	Consumer	Porirua	W
Standard Class	MB-18085	Mick Brown	Consumer	Hamilton	W

Sorted Sub-Category and Quantity Data:

IBM Cognos Analytics with Watson

* New data module

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Search content

Properties

Data module

Grid

Relationships

Custom tables

Search

Country

Postal Code

Market

Region

Product ID

Category

Sub-Category

Product Name

Sales

Quantity

Discount

Profit

Shipping Cost

Order Priority

Sub-Category	Product Name	Sales	Quantity	Discount
Accessories	Logitech Memory Card, Bluetooth	723.66	7	0
Accessories	Belkin Keyboard, Programmable	384.21	5	0.1
Accessories	Memorex Router, Programmable	891.756	4	0.1
Accessories	Logitech diNovo Edge Keyboard	2249.91	9	0
Accessories	Memorex Router, Bluetooth	738.63	6	0.5
Accessories	Memorex Router, Bluetooth	2297.96	14	0
Accessories	Memorex Router, Bluetooth	590.904	6	0.6
Accessories	Logitech P710e Mobile Speakerphone	1287.45	5	0
Accessories	Enermax Router, USB	775.62	3	0
Accessories	Plantronics Savi W720 Multi-Device Wireless	1687.8	4	0

The Data has been Prepared by IBM Cognos.

link:https://us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=957208312_a39bca1b2e6f4c73a508d8a4f35bbbe1_sessionTemp&objRef=&tid=957208312_a39bca1b2e6f4c73a508d8a4f35bbbe1_sessionTemp