

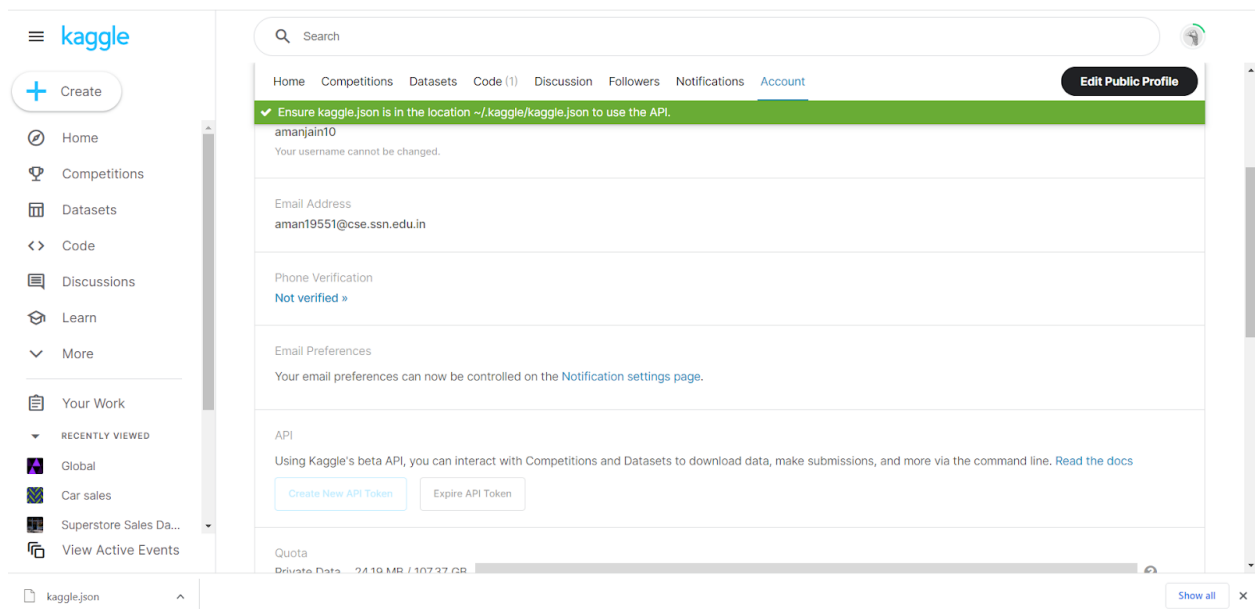
Project Development Phase Delivery Of Sprint 3

Date	13th November 2022
Team ID	PNT2022TMID53156
Project Name	Project - Global Sales Data Analytics
Team Leader	Aman Jain


PROJECT DEVELOPMENT PHASE:


In this phase, we have completed the following tasks.

1) Fetch Data from external API (Kaggle API).(ipynb file)



The screenshot displays the Kaggle user interface. On the left is a sidebar with navigation links: Home, Competitions, Datasets, Code, Discussions, Learn, More, Your Work, and a 'RECENTLY VIEWED' section listing 'Global', 'Car sales', and 'Superstore Sales Da...'. The main content area shows the 'Account' page for user 'amanjain10'. It includes a green notification bar stating 'Ensure kaggle.json is in the location ~/.kaggle/kaggle.json to use the API.' Below this, the profile details are shown: Email Address 'aman19551@cse.ssn.edu.in', Phone Verification status 'Not verified', and Email Preferences. The API section indicates 'Using Kaggle's beta API' and provides buttons for 'Create New API Token' and 'Expire API Token'. At the bottom, a quota bar shows 'Private Data: 24.19 MB / 107.77 GB'.

 Search




Aman Jain

Add occupation

Add organization

Add location

Joined 8 months ago · last seen in the past day



Competitions

Novice

[Home](#)
[Competitions](#)
[Datasets](#)
[Code \(1\)](#)
[Discussion](#)
[Followers](#)
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[Account](#)


[Edit Public Profile](#)


This tab is hidden from other users until you create a public dataset.

A data scientist with no data? No such thing!

Publish any dataset on Kaggle's [public data platform](#), and your collection will grow here.
Find other data enthusiasts with shared interests to discuss and collaborate for work or play.


[New Dataset](#)

 Search datasets

 Filters

[Your Work](#)
[Shared With You](#)
[Bookmarks](#)

[Updated](#)



Global

Aman Jain · Updated 22 minutes ago

Private · Usability 2.4 · 1 File (CSV) · 4 MB

0

The screenshot shows a JupyterLab environment with a dark theme. The top bar displays the file name 'Global_Updated.ipynb' and various menu options. The left sidebar shows a file explorer with a directory structure including 'sample_data', 'Global.csv', 'global.zip', and 'kaggle.json'. The main area is a terminal window with a list of commands and their output:

```
[1] !pip install -q kaggle
[2] !mkdir ~/.kaggle
[3] !cp kaggle.json ~/.kaggle/
[4] !kaggle datasets download -d amanjain10/global

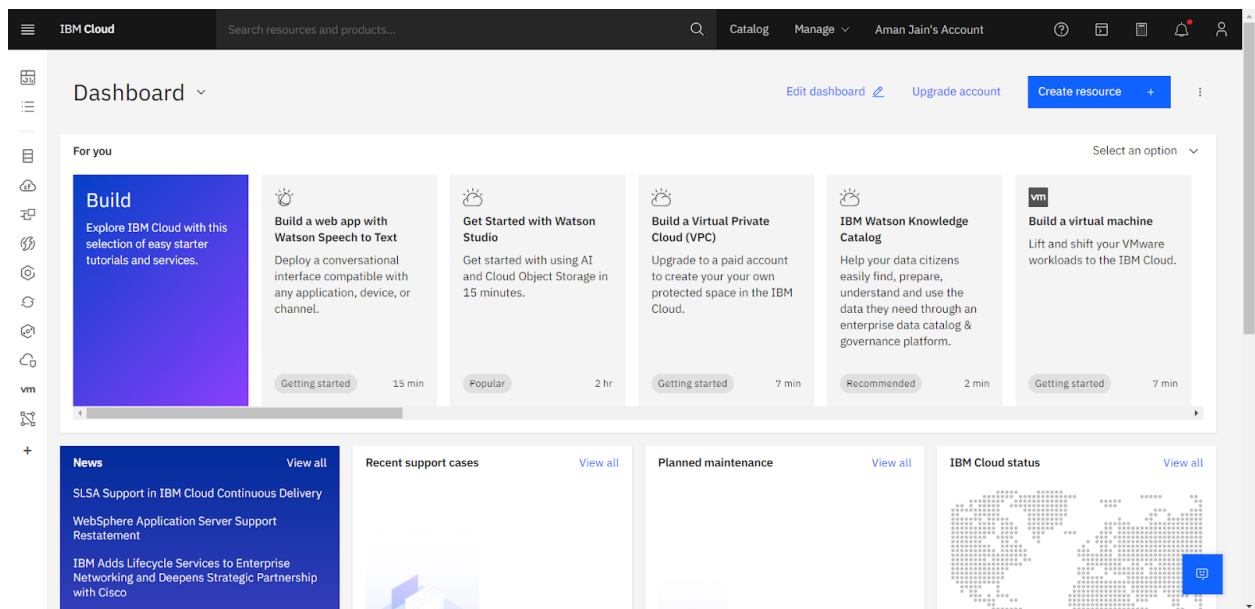
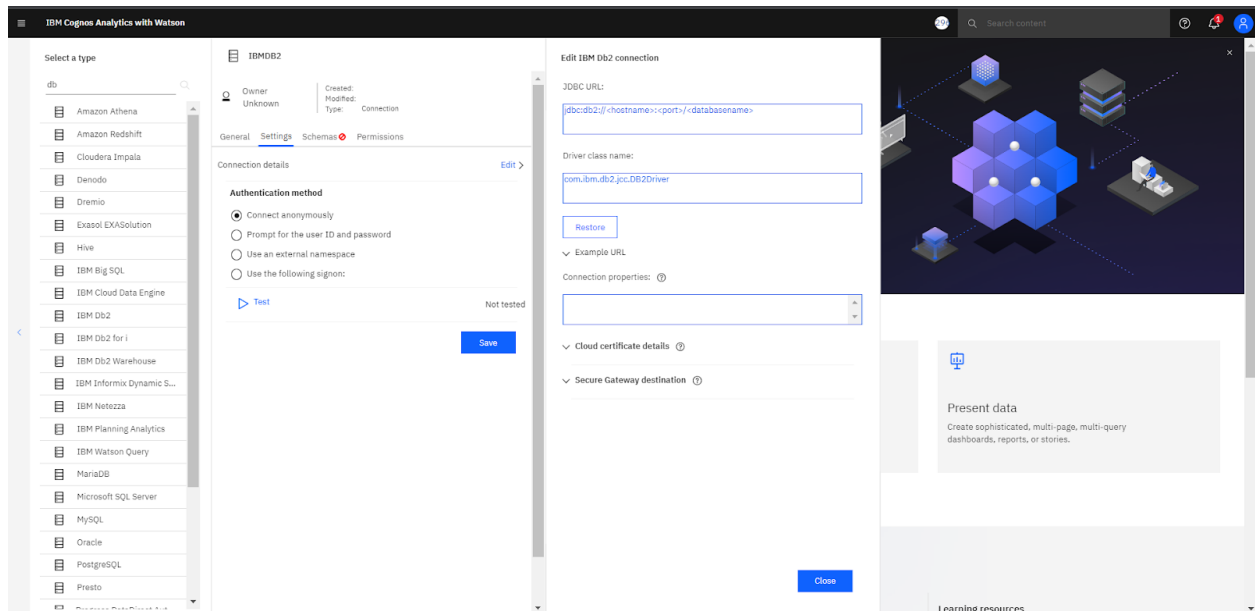
Warning: Your Kaggle API key is readable by other users on this system! To fix this, you can run 'chmod 600 /root/.kaggle/kaggle.json'
Downloading global.zip to /content
  6% 0.00/3.48M [00:00<?, ?B/s]
100% 3.48M/3.48M [00:00<00:00, 190MB/s]

!unzip /content/global.zip

Archive: /content/global.zip
  inflating: Global.csv
```

The terminal window also shows a progress bar for the download and a status bar at the bottom indicating '0s completed at 21:53'.

2) IBM DB2 service creation and DB2 connectivity with cognos.(pdf file)



IBM Cloud

Search resources and products...

Catalog

Manage

Aman Jain's Account

Db2

A fully managed, highly-performant relational data store running the enterprise-class Db2 database engine.

Create

About

Type

Service

Provider

IBM

Last updated

11/10/2022

Category

Databases

Compliance

EU Supported

HIPAA Enabled

IAM-enabled

Location

Sydney

Frankfurt

London

Dallas

Sao Paulo

Toronto

Tokyo

Milan 01

Select a location

Dallas (us-south)

Select a pricing plan

Displayed prices do not include tax. Monthly prices shown are for country or location: [United States](#)

Plan	Features	Pricing
Lite	200 MB of data storage 5 simultaneous connections Shared multitenant system The Free plan provides a free Db2 service for development and evaluation. The plan has a set amount of limitations as shown. You can continue using the free plan for as long as needed, however, users are asked to re-extend their free account every 90 days by email. If you do not re-extend, your free account is cleaned out a further 90 days later. This helps provide free resources for everyone. Lite plan services are deleted after 30 days of inactivity.	Free

Summary

Db2

Location: Dallas

Plan: Lite

Service name: Db2-u5

Resource group: Default

☒ I have read and agree to the following license agreements:

Terms

Create

Add to estimate

IBM Cloud

Search resources and products...

Catalog

Manage

Aman Jain's Account

Resource list

Create resource

Name	Group	Location	Product	Status	Tags
Filter by name or IP address... Filter by group or org... Filter... Filter... Filter... Filter...					
Compute (0)					
Containers (0)					
Networking (0)					
Storage (0)					
AI / Machine Learning (0)					
Analytics (0)					
Blockchain (0)					
Databases (1)					
Db2-u5	Default	Dallas	Db2	Provision in progre...	
Developer tools (0)					
Logging and monitoring (0)					
Migration (0)					

IBM Cloud

Search resources and products...

CatalogManageAman Jain's Account

Resource list

Create resource

Name	Group	Location	Product	Status	Tags
Filter by name or IP address...Filter by group or org...Filter...Filter...Filter...Filter...					
Compute (0)					
Containers (0)					
Networking (0)					
Storage (0)					
AI / Machine Learning (0)					
Analytics (0)					
Blockchain (0)					
Databases (1)					
Db2-u5	Default	Dallas	Db2	Active	
Developer tools (0)					
Logging and monitoring (0)					
Migration (0)					

IBM Cognos Analytics with Watson

IBMDB2

Owner Aman ... 8db5b5b Created: 15/11/2022, 11:10 Modified: 15/11/2022, 11:10 Type: Data Server

GeneralConnectionsPermissions

Name	Modified
IBMDB2	15/11/2022 11:24

IBMDB2

Owner Aman ... 8db5b5b Created: 15/11/2022, 11:10 Modified: 15/11/2022, 11:24 Type: Connection

GeneralSettingsSchemasPermissions

Connection details

Authentication method

Connect anonymously

Prompt for the user ID and password

Use an external namespace

Use the following signon:

Test

Success

Save

Edit IBM DB2 connection

JDBC URL:

jdbc:db2://120f73c5-d84a-4b60-85b9-ab1a4348f4a4.c3n41cmd0nqrk39u98g.databases.appdomain.cloud:32286/ibmdbuser-ig92926gassword-quibmRTEub3WjrtasIConnectGn-stuqe

Driver class name:

com.ibm.db2.jcc.DB2Driver

Restore

Example URL

Connection properties:

Cloud certificate details

Secure Gateway destination

Close

Present data

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

Learning resources

IBM Db2 on Cloud

Load Data

Load History

Tables

Views

Indexes

Aliases

MQs

Sequences

Application objects

Notifications

Clear all

Load details

LOADING

My computer Target
Global.csv FGT92926.SALES

View Table

Load More Data

Status

Settings

Loading

0

0

0

Rows read

Rows loaded

Rows rejected

Start time

11/15/2022 11:01:42 PM

Elapsed time

a few seconds ago

Did you know?

You can import SQL statements from a local text file into the SQL editor to run against your database.

1

Auto-create table

2

Upload

3

Load data

4

Complete

Errors

Warnings

Available after load is finished

IBM Db2 on Cloud

Load Data

Load History

Tables

Views

Indexes

Aliases

MQs

Sequences

Application objects

Warnings

768 warnings

Load details

! WARNING
768 warnings

My computer Target
Global.csv FGT92926.SALES

View Table

Load More Data

Status

Settings

51,290

51,290

0

Rows read

Rows loaded

Rows rejected

Start time

11/15/2022 11:01:42 PM

End time

11/15/2022 11:01:56 PM

The data load job succeeded.

You can now work with your data.

Errors

Warnings 768

No errors

But, there are 768 warnings.

IBM Db2 on Cloud

Data objects

Saved objects

Filter objects

FGT92926

Tables

SALES

Views

MQTs

Aliases

Nicknames

*Untitled - 1

SQL

1

2

select * from SALES;

History

Results

SALES

Result set 1

Details

Filter table

Truncated number of records:462

ROW_ID	ORDER_ID	ORDER_DATE	SHIP_DATE	SHIP_MODE	CUSTOMER_ID	CUSTOMER_NAME	SEGMENT
21306	IN-2013-63773	31-05-2013	02-06-2013	First Class	VS-21820	Vivek Sundaresam	Consumer
51130	UP-2014-4500	17-07-2014	19-07-2014	Second Class	DJ-3510	Don Jones	Corporate
32382	US-2013-143819	02-03-2013	06-03-2013	Standard Class	KD-16270	Karen Daniels	Consumer
23175	IN-2012-30943	03-08-2012	08-08-2012	Standard Class	KH-16330	Katharine Harms	Corporate
46655	CM-2012-6440	13-12-2012	15-12-2012	First Class	BP-1230	Benjamin Patterson	Consumer
46653	CM-2012-6440	13-12-2012	15-12-2012	First Class	BP-1230	Benjamin Patterson	Consumer
28198	IN-2014-61393	31-10-2014	03-11-2014	First Class	DK-13090	Dave Kipp	Consumer

Items per page: 501-50 of 462 items11 of 10 pages

IBM Cognos Analytics with Watson

Data server connections

IBMDB2

Weather Company

IBMDB2

Owner: Aman ... (8db5b5)

Created: 16/11/2022, 11:10

Modified: 16/11/2022, 11:10

Type: Data Server

General

Connections

Permissions

IBMDB2

15/11/2022 11:10

IBMDB2

Owner: Aman ... (8db5b5)

Created: 16/11/2022, 11:10

Modified: 16/11/2022, 11:24

Type: Connection

General

Settings

Schemas

Permissions

Status

Schema name

Tables loaded

AUDIT

DB2INST1

ERRORSCHEMA

FGT92926

SQL01770

1 / 1

Present data

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

Learning resources

3) Create a Data module(Data cleaning/Wrangling/preprocessing).(pdf file)

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Grid Relationships Custom tables

Search

Sales

Row Id

Order Id

Order Date

Ship Date

Ship Mode

Customer Id

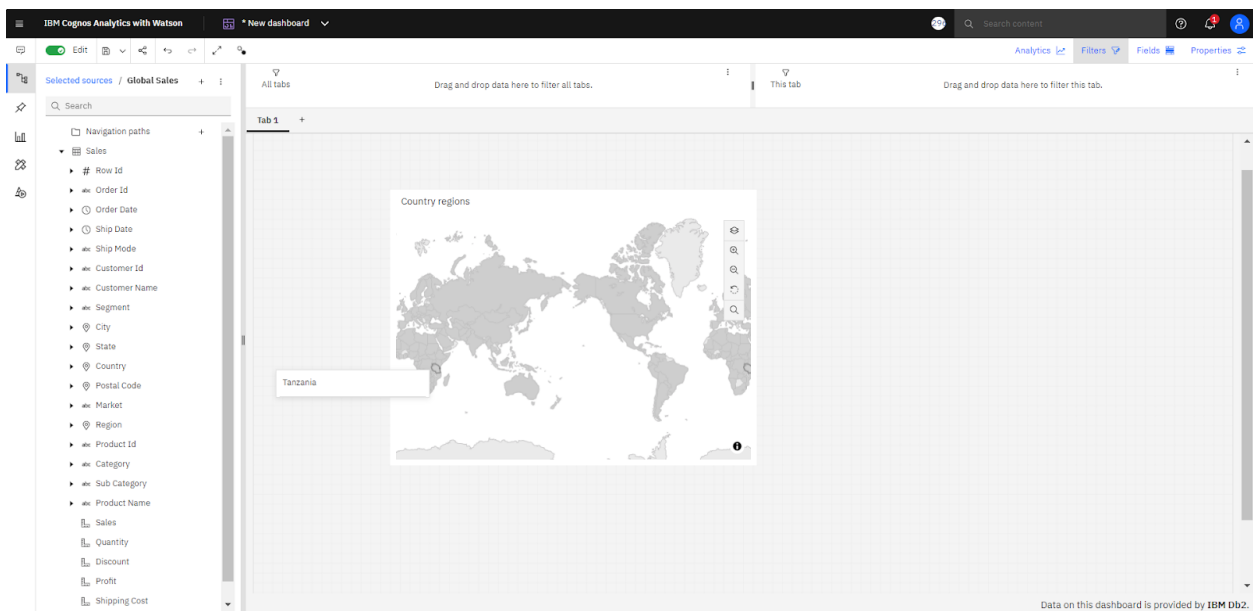
Customer Name

Segment

City

State

Row Id	Order Id	Order Date	Ship Date	Ship Mode	Customer Id	Customer Name	Segment	City	State
1	MX-2014-143658	02-10-2014	06-10-2014	Standard Class	SC-20575	Sonia Cooley	Consumer	Mexico City	Distrito Federal
2	MX-2012-155047	15-10-2012	20-10-2012	Standard Class	KW-16570	Kelly Williams	Consumer	Dos Quebradas	Risaralda
3	MX-2012-155047	15-10-2012	20-10-2012	Standard Class	KW-16570	Kelly Williams	Consumer	Dos Quebradas	Risaralda
4	MX-2012-155047	15-10-2012	20-10-2012	Standard Class	KW-16570	Kelly Williams	Consumer	Dos Quebradas	Risaralda
5	MX-2012-155047	15-10-2012	20-10-2012	Standard Class	KW-16570	Kelly Williams	Consumer	Dos Quebradas	Risaralda
6	MX-2012-155047	15-10-2012	20-10-2012	Standard Class	KW-16570	Kelly Williams	Consumer	Dos Quebradas	Risaralda
7	MX-2013-134096	27-09-2013	01-10-2013	Standard Class	DP-13000	Darren Powers	Consumer	São Paulo	São Paulo
8	MX-2013-134096	27-09-2013	01-10-2013	Standard Class	DP-13000	Darren Powers	Consumer	São Paulo	São Paulo
9	MX-2013-134096	27-09-2013	01-10-2013	Standard Class	DP-13000	Darren Powers	Consumer	São Paulo	São Paulo
10	MX-2013-134096	27-09-2013	01-10-2013	Standard Class	DP-13000	Darren Powers	Consumer	São Paulo	São Paulo
11	MX-2013-134096	27-09-2013	01-10-2013	Standard Class	DP-13000	Darren Powers	Consumer	São Paulo	São Paulo
12	MX-2013-156335	05-03-2013	12-03-2013	Standard Class	TB-21250	Tim Brockman	Consumer	Managua	Managua
13	MX-2013-156335	05-03-2013	12-03-2013	Standard Class	TB-21250	Tim Brockman	Consumer	Managua	Managua
14	MX-2014-121923	24-09-2014	01-10-2014	Standard Class	PK-18910	Paul Knutson	Home Office	Managua	Managua
15	MX-2014-135706	18-10-2014	23-10-2014	Standard Class	JK-15625	Jim Karlsson	Consumer	Brasilia	Federal District
16	MX-2014-135706	18-10-2014	23-10-2014	Standard Class	JK-15625	Jim Karlsson	Consumer	Brasilia	Federal District
17	US-2013-126655	26-06-2013	01-07-2013	Standard Class	HE-14800	Harold Engle	Corporate	San Miguelito	Panama
18	US-2013-126655	26-06-2013	01-07-2013	Standard Class	HE-14800	Harold Engle	Corporate	San Miguelito	Panama
19	US-2013-126655	26-06-2013	01-07-2013	Standard Class	HE-14800	Harold Engle	Corporate	San Miguelito	Panama



IBM Cognos Analytics with Watson Global Sales

Search content

Properties

Data module

Grid Relationships Custom tables

Search

Sales

Row Id

Order Id

Order Date

Ship Date

Ship Mode

Customer Id

Customer Name

Segment

City

State

Country

Postal Code

Market

Region

Product Id

Product Name

Sub Category

Sales

Quantity

Discount

Profit

Shipping Cost

Order Priority

Clean - Postal Code

NULL values

☐ Replace this value with NULL

☒ Replace NULL values with

0

00000

Cancel Clean

Row Id	Customer Name	Segment	City	State	Country	Postal Code	Market	Region	Product Id
95	Rick Hansen	Consumer	New York City	New York	United States	10024	US	East	TEC-AC-10003033
10	Justin Ritter	Corporate	Wollongong	New South Wales	Australia	Null	APAC	Oceania	FUR-CH-10003950
30	Craig Reiter	Consumer	Brisbane	Queensland	Australia	Null	APAC	Oceania	TEC-PH-10004664
75	Katherine Murray	Home Office	Berlin	Berlin	Germany	Null	EU	Central	TEC-PH-10004563
5	Rick Hansen	Consumer	Dakar	Dakar	Senegal	Null	Africa	Africa	TEC-SHA-10000501
55	Jim Mitchum	Corporate	Sydney	New South Wales	Australia	Null	APAC	Oceania	TEC-PH-10000030
40	Toby Swindell	Consumer	Wellington	Wellington	New Zealand	Null	APAC	Oceania	FUR-CH-10004050
105	Mick Brown	Consumer	Hamilton	Waikato	New Zealand	Null	APAC	Oceania	FUR-TA-10002958
20	Jane Waco	Corporate	Sacramento	California	United States	95823	US	West	OFF-BI-10003527
85	Joseph Holt	Consumer	Concord	North Carolina	United States	28027	US	South	FUR-TA-10000198
195	Greg Maxwell	Corporate	Alexandria	Virginia	United States	22304	US	South	OFF-SU-10002881
80	Anthony Jacobs	Corporate	Kabul	Kabul	Afghanistan	Null	APAC	Central Asia	FUR-TA-10001889
10	Magdelene Morse	Consumer	Jizan	Jizan	Saudi Arabia	Null	EMEA	EMEA	TEC-CIS-10001717
15	Vicky Freymann	Home Office	Toledo	Parana	Brazil	Null	LATAM	South	FUR-CH-10002033
20	Peter Fuller	Consumer	Mudanjiang	Heilongjiang	China	Null	APAC	North Asia	OFF-AP-10003500

IBM Cognos Analytics with Watson Global Sales

Search content

Properties

Data module

Grid Relationships Custom tables

Search

Sales

Row Id

Order Id

Order Date

Ship Date

Ship Mode

Customer Id

Customer Name

Segment

City

State

Product Id

Product Name

Sub Category

Sales

Quantity

Discount

Profit

Shipping Cost

Order Priority

Filter...

Create data group...

Create navigation path...

Split...

Hide from users

Remove

Format data...

Clean...

Sort descending

Sort ascending

Properties

Row Id	Order Id	Order Date	Ship Date	Ship Mode	Customer Id	Customer Name	Segment	City	State
32298	CA-2012	31-07-2012	31-07-2012	Same Day	RH-19495	Rick Hansen	Consumer	New York City	New York
26341	JN-2013	07-02-2013	07-02-2013	Second Class	JR-16210	Justin Ritter	Corporate	Wollongong	New South Wales
25330	JN-2013	18-10-2013	18-10-2013	First Class	CR-12730	Craig Reiter	Consumer	Brisbane	Queensland
13524	ES-2013	30-01-2013	30-01-2013	First Class	KM-16375	Katherine Murray	Home Office	Berlin	Berlin
47221	SG-2013	06-11-2013	06-11-2013	Same Day	RH-9495	Rick Hansen	Consumer	Dakar	Dakar
22732	JN-2013	01-07-2013	01-07-2013	Second Class	JM-15655	Jim Mitchum	Corporate	Sydney	New South Wales
30570	JN-2011	09-11-2011	09-11-2011	First Class	TS-21340	Toby Swindell	Consumer	Porirua	Wellington
31192	JN-2012-86369	14-04-2012	18-04-2012	Standard Class	MB-18085	Mick Brown	Consumer	Hamilton	Waikato
40155	CA-2014-135909	14-10-2014	21-10-2014	Standard Class	JW-15220	Jane Waco	Corporate	Sacramento	California
40936	CA-2012-116638	28-01-2012	31-01-2012	Second Class	JH-15985	Joseph Holt	Consumer	Concord	North Carolina
34577	CA-2011-102988	05-04-2011	09-04-2011	Second Class	QM-14695	Greg Maxwell	Corporate	Alexandria	Virginia
26879	ID-2012-28402	19-04-2012	22-04-2012	First Class	AJ-10780	Anthony Jacobs	Corporate	Kabul	Kabul
45794	SA-2011-1830	27-12-2011	29-12-2011	Second Class	MM-7260	Magdelene Morse	Consumer	Jizan	Jizan
4132	MX-2012-130015	13-11-2012	13-11-2012	Same Day	VF-21715	Vicky Freymann	Home Office	Toledo	Parana
27704	JN-2013-73951	06-06-2013	08-06-2013	Second Class	PF-19120	Peter Fuller	Consumer	Mudanjiang	Heilongjiang