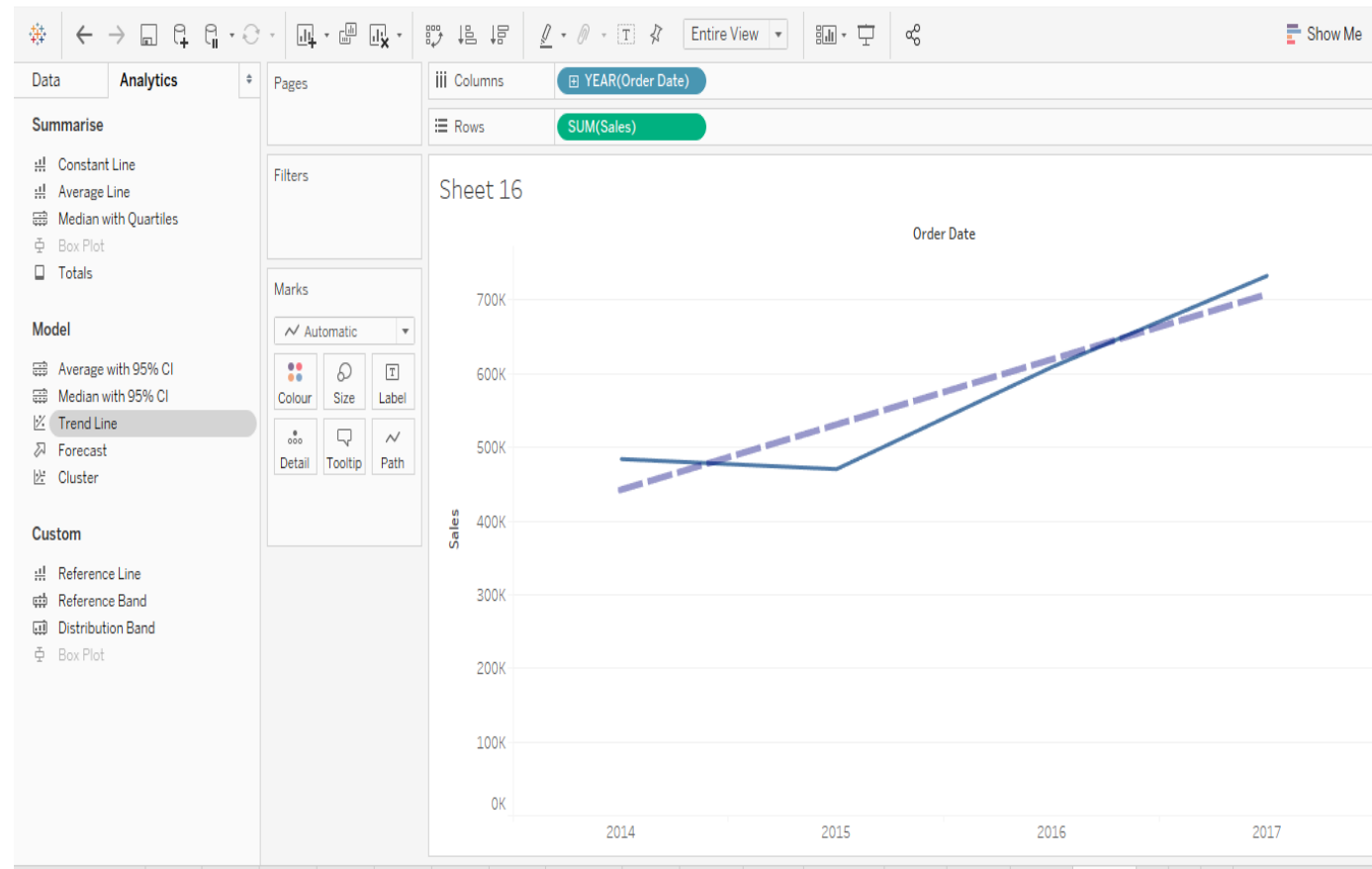


# Trend Lines

A trend line is a line showing the patterns or trends emerging from data points. In Tableau, we can have straight or curved trend lines depending on the model you select.

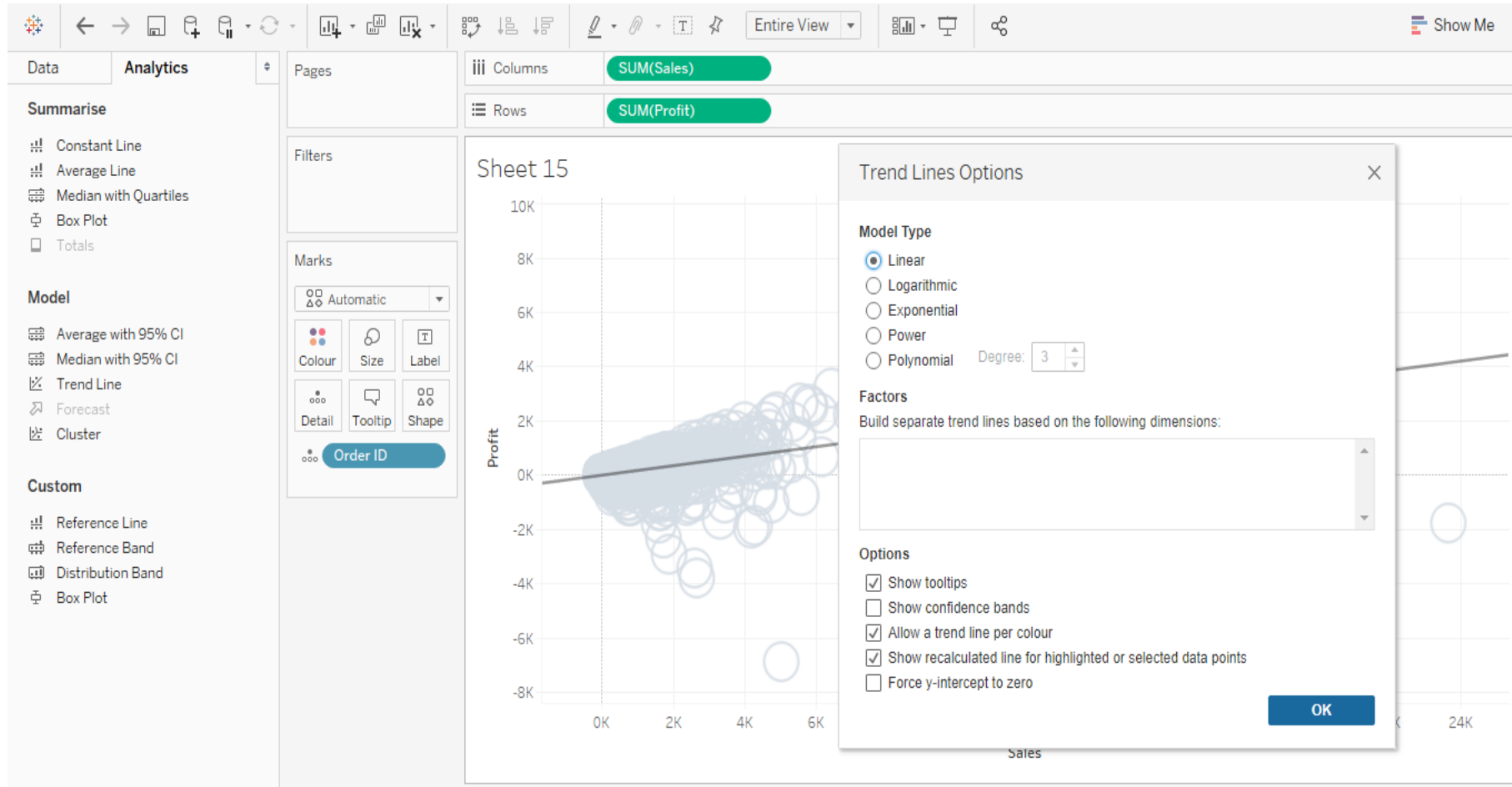
Tableau has a total of five types of trend lines:

- Linear
- Exponential
- Logarithmic
- Polynomial
- Power



# Trend Lines

A trend line displaying the relationship between profit & sales



# Clustering

Clustering means dividing a data set into segments or clusters having relevant data values. Clustering helps us conduct a comparative analysis of data in Tableau. A cluster contains similar data values of a dimension that is the values in a cluster are more related to each other than the data in other clusters.

Clustering allows you to statistically group similar dimension members

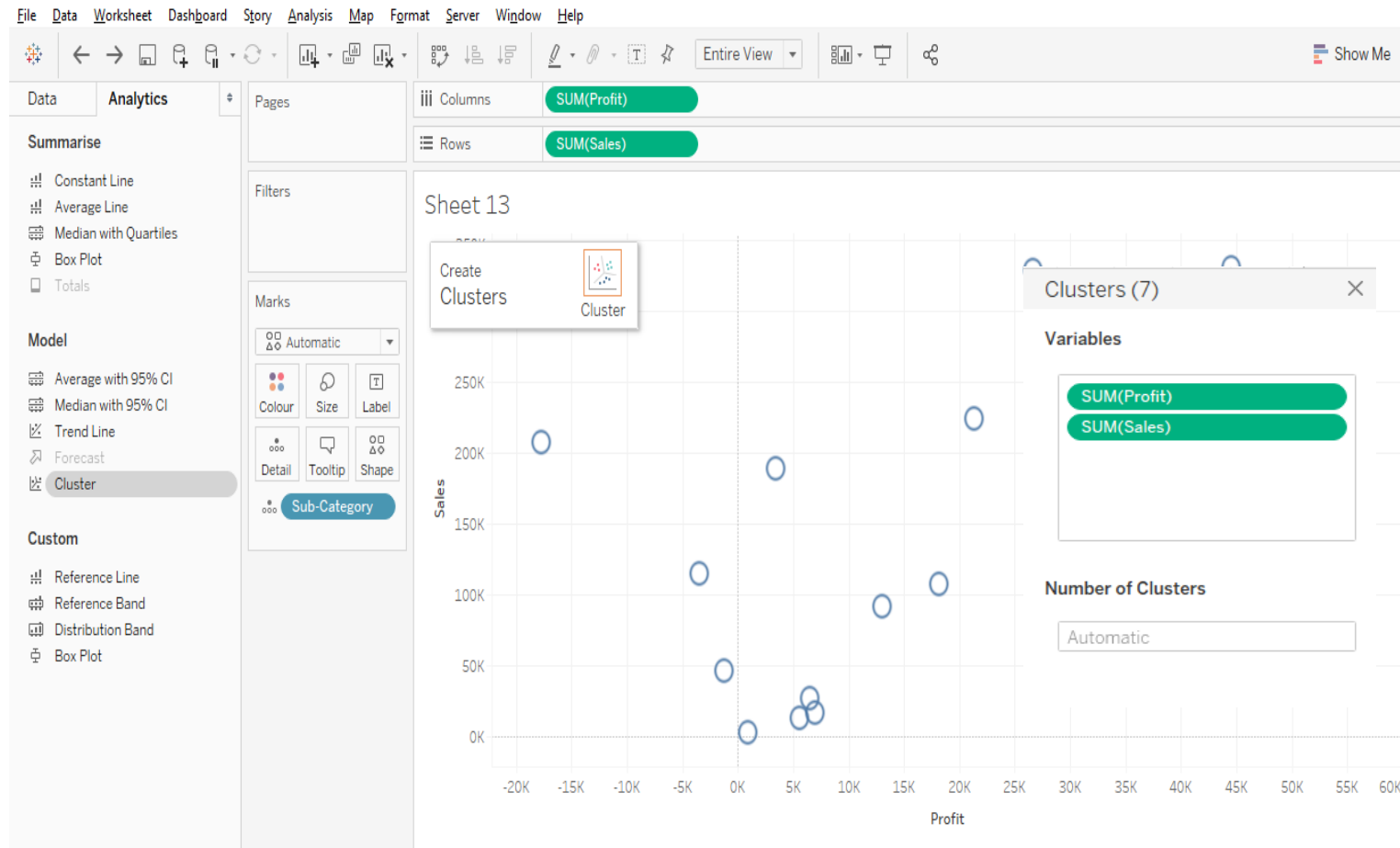
In Tableau clustering is done on the basis of K-means clustering algorithm.

To Create a cluster you just need to drag the cluster from Analytics pane to visualization.



# Clustering

To Create a cluster you just need to drag the cluster from Analytics pane to visualization.



# Connecting to SQL Server

In the list of available sources select Microsoft SQL Server. Specify the server name and optionally the database name.

The screenshot shows the Tableau desktop application window. The title bar reads 'Tableau - Book3 - Tableau license expires in 4 days'. The menu bar includes 'File', 'Data', 'Server', and 'Help'. On the left, a dark blue sidebar contains the 'Connect' section with a search bar and a list of data sources: 'Tableau Server', 'To a File' (Microsoft Excel, Text file, JSON file, Microsoft Access, PDF file, Spatial file, Statistical file, More...), and 'To a Server' (Web Data Connector, Other Databases (JDBC), Other Databases (ODB...), Microsoft SQL Server, More...). The main area is titled 'Open' and features a bar chart labeled 'SS SUMMARY'. A modal dialog titled 'Microsoft SQL Server' is open, showing the 'General' tab. The dialog contains the following fields: 'Server' (DESKTOP-M37OQNU\SQLEXPRESS), 'Database' (TEST), and 'Authentication' (Use Windows Authentication (preferred)). There are two checkboxes: 'Require SSL' and 'Read uncommitted data', both of which are unchecked. A 'Sign In' button is located at the bottom right of the dialog. In the background, the 'Accelerators' section is visible, showing a map of the United States and a bar chart. On the right side of the main area, there are two links: 'Open a Workbook' and 'More Accelerators'.

Tableau - Book3 - Tableau license expires in 4 days

File Data Server Help

Connect

Search for Data

Tableau Server

To a File

Microsoft Excel

Text file

JSON file

Microsoft Access

PDF file

Spatial file

Statistical file

More...

To a Server

Web Data Connector

Other Databases (JDBC)

Other Databases (ODB...)

Microsoft SQL Server

More...

Open

SS SUMMARY

Microsoft SQL Server

General Initial SQL

Server

DESKTOP-M37OQNU\SQLEXPRESS

Database

TEST

Authentication

Use Windows Authentication (preferred)

☐ Require SSL

☐ Read uncommitted data

Sign In

Open a Workbook

More Accelerators



# Connecting to SQL Server

Select the required table from the table list and drop it in the data area.  
Click on Update Now or Update Automatically to get the data.

Tableau - Book3 - Tableau license expires in 4 days

File Data Server Window Help

Connections [Add](#)

DESKTOP-M37... \SQLEXPRESS  
Microsoft SQL Server

Database  
TEST

Table  
All 407 Recommended

emp

Emp  
EMP2  
emp2  
New Custom SQL  
New Union  
New Table Extension

Stored Procedures

AD\_EMP  
ADD\_EMP  
ADD\_EMP\_SAL  
ADD\_SAL  
ADD\_STU

Go to Worksheet

Emp (TEST)

Connection  
☒ Live ☐ Extract

Filters  
0 [Add](#)

Recommended Data Sources 0

Emp

Need more data?  
Drag tables here to relate them. [Learn more](#)

Emp

rows

Update Now

Update Automatically

Emp EID	Emp Name	Emp Address1	Emp Address2	Emp City	Emp Phone No	Emp Email	Emp DOB
1001	RAMESH GUPTA	SECTOR 7	Rohini	DELHI	99990027		
1002	Sandeep Sharma	SECTOR 2	PALAM	GURGAON	9567890C		
1003	Rajesh Sharma	Sector 11	Dwarka	DELHI	9999001C		
1004	Yogeshwar Sharma	Sector 11	Dwarka	DELHI	8899001C		



# Connect using SQL Queries

Using SQL queries we can connect to you can connect to a specific query rather than the entire data set

 New Custom SQL

Edit Custom SQL

×

```
select emp.eid, NAME, CITY, DOJ, DOB, DEPT , DESI, SALARY  
FROM EMP  
INNER JOIN EMP_SAL  
ON EMP.EID=EMP_SAL.EID
```

Preview Results...

Insert Parameter ▼

OK

Cancel



# Parameterized SQL Queries

In addition to simple Queries we can make a dynamic query using parameters

The screenshot shows the Tableau Desktop interface with a custom SQL query window open. The query is as follows:

```
select emp.eid, NAME, CITY, DOJ, DOB, DEPT, DESI, SALARY
FROM EMP
INNER JOIN EMP_SAL
ON EMP.EID=EMP_SAL.EID
```

The 'Create Parameter' dialog is open, showing the following details:

- Name: Parameter 1
- Data type: Float
- Current value: 1
- Value when workbook opens: Current value
- Display format: Automatic
- Allowable values: All (selected), List, Range

The background shows a data source named 'TEST' with a table containing employee data. The data is displayed in a grid with columns: eid, NAME, CITY, DOJ, DOB, DEPT, DESI, SALARY.

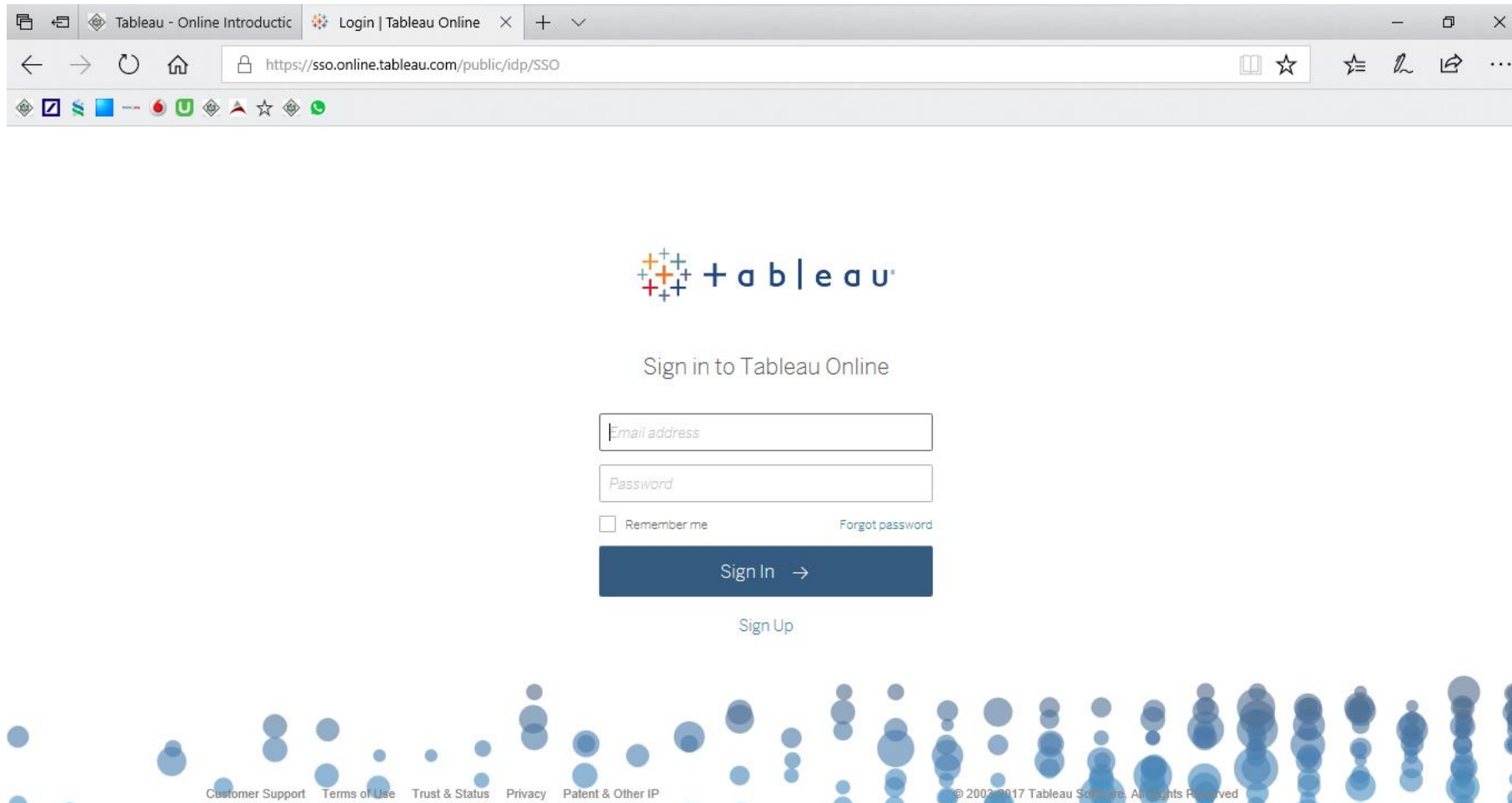
eid	NAME	CITY	DOJ	DOB	DEPT	DESI	SALARY
1005	Manoj Kumar	DELHI	3/1/2018	10/11/1983	HR	ASSOCIATE	66,000
1007	Kapil Sharma	GURGAON	1/2/2017	10/10/1989	HR	ASSOCIATE	71,500
1011	AMIT KAPOOR	DELHI	12/12/2018	10/5/1990	HR	ASSOCIATE	35,000
1012	MONIKA ARORA	DELHI	12/12/2018	10/21/1989	HR	SR. ASSOCIATE	50,000
1019	RAJAT KAPOOR	DELHI	12/12/2018	10/10/1989	HR	ASSOCIATE	55,000
1020	Rohan Kumar	DELHI	1/2/2017	10/10/1989	HR	ASSOCIATE	71,500
1035	MANOJ TIWARI	GURGAON	12/12/2018	10/5/1990	HR	ASSOCIATE	35,000
1037	MIKE	DELHI	12/12/2018	10/21/1989	HR	SR. ASSOCIATE	50,000
1050	AMAN MUDGAL	DELHI	12/12/2018	10/10/1989	HR	ASSOCIATE	55,000





# Tableau Online


Tableau online is a platform to share our report / analysis with different people.



The screenshot shows a web browser window with the address bar displaying `https://sso.online.tableau.com/public/idp/SSO`. The page features the Tableau logo at the top, followed by the text "Sign in to Tableau Online". Below this, there are two input fields: "Email address" and "Password". A checkbox labeled "Remember me" and a link "Forgot password" are positioned below the password field. A dark blue "Sign In" button with a right-pointing arrow is located below the input fields. A "Sign Up" link is positioned below the "Sign In" button. At the bottom of the page, there is a row of links: "Customer Support", "Terms of Use", "Trust & Status", "Privacy", and "Patent & Other IP". The footer also includes the copyright notice "© 2002-2017 Tableau Software. All Rights Reserved".

Tableau - Online Introductic Login | Tableau Online

`https://sso.online.tableau.com/public/idp/SSO`

 + a b | e a u

Sign in to Tableau Online

Email address

Password

☐ Remember me [Forgot password](#)

Sign In →

[Sign Up](#)

[Customer Support](#) [Terms of Use](#) [Trust & Status](#) [Privacy](#) [Patent & Other IP](#)

© 2002-2017 Tableau Software. All Rights Reserved

Projects , Workbooks, Views, Data Sources

Users, Groups, Status, Settings

