Tableau interview questions

1. What is Tableau?

Tableau is a business intelligence software that allows interactive visualization and handling of large amounts of data. It is used by businesses around the world to crunch numbers and use the insights for growth and development.

Tableau is one of the most important tools for data analytics and visualization only competed by Apache Superset, Qlik and Metabase to name a few alternatives.

2. Explain the different data types of Tableau.

There are 7 data types in Tableau

1. Boolean (True/False)
2. Date (Individual Value)
3. Date and Time
4. Geography
5. Text or String
6. Decimal Number
7. Whole Number

A visualization is typically made up of these seven types.

Also Read: Python Tutorial for beginners

3. What are Measures and Dimensions?

Measures and Dimensions are attributes that define a specific dataset in Tableau.

Measures are measurable quantities of data which are analysed against dimensions. Any number of measures can be added to a single string, which is governed by dimensions. For example, an inventory of an online shop can have a total number of items, their prices, number of items sold historically, payment mode, etc. All of these can be considered measures.

On the other hand, dimensions are basically descriptions which allow visualization to take place. They allow a user to describe a single metric in different ways. A dimension table consists of all these descriptions.

4. State the importance of data servers in Tableau

There are two functions of a data server in Tableau. One, it allows continuous syncing of all data – from datasets to past calculations, aliases to definitions – on the server which can then be accessed from anywhere. This allows for a more wholesome approach during any given task. Thus, it provides security and fast access.

Secondly, having a data server means one does not have to download all the required data to a local machine to run a visualization or a report. It can be pulled easily off the internet through the server.

Also Read: Introduction to Data Visualization

5. What are the different filters in Tableau?

There are mainly three filters in Tableau which are used to restrict data pull. They are:

- Normal Filter – it is used to restrict a string of data from the base on selected measure or dimension
- Quick – it is used to change values dynamically across worksheets in a dashboard
- Context – it creates a temporary data source for use in any worksheet without disturbing the main dataset

Each of these filters has specific usage in any given reporting.

6. How to create a calculated field in Tableau?

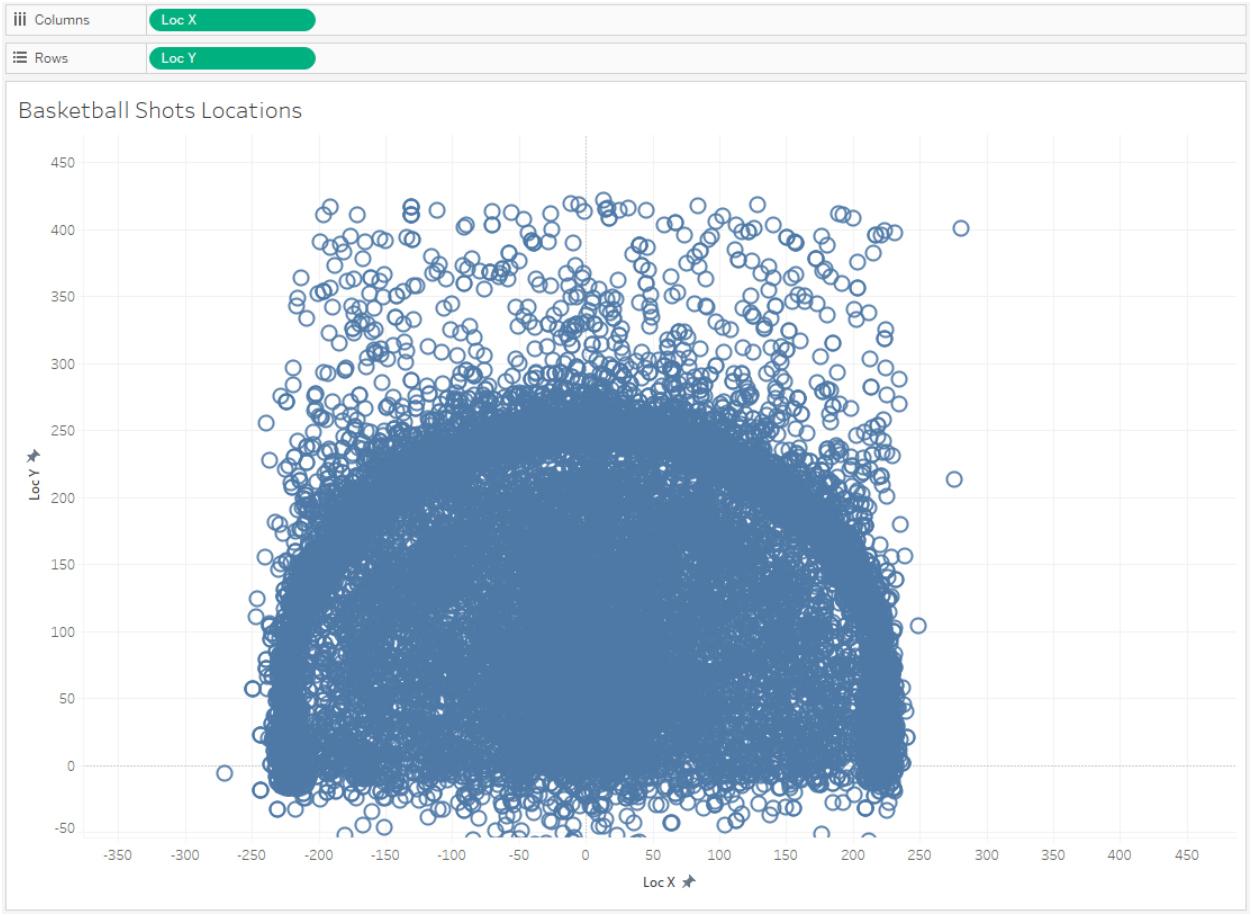
On Tableau desktop version 2019.2, access the menu on the Data pane and click on 'Create > Calculated Field'. Name the field and create the required formula.

7. What is a heatmap? Give an example.

A heatmap is a type of visualization used to demonstrate a set of data through varying shades of colours where the darkest shade of a specific colour denotes an extreme value (high intensity/density). It is typically used to compare two or more measures.

A quick example of a heatmap would be to understand the anatomy of the human body and observe the level of warmth depending upon the temperature of specific organs. If the red-yellow combination of colours is used, the areas that show red will denote the maximum temperature.

Here's an example of a heatmap showing the different locations of basketball shots.



8. What is aggregation and dis-aggregation in Tableau?

Aggregation is the simple concept of averaging values in a given data set column. If a specific report contains the historical change in prices of a product, aggregation will help in finding its average value. In most cases, Tableau automatically aggregates a given set of data.

Disaggregation is the opposite of averaging, which can be helpful if a user wants individual data points. Both aggregated and disaggregated data can also be utilized in a single worksheet.

9. Differentiate between discrete and continuous.

Discrete and continuous are types of dimension flow in Tableau.

Discrete values are individual points that are counted as distinct values, separated from a batch. Example – number of states in a country.

Continuous values allow a user to utilize values within a finite or infinite interval. Examples – stock price movements of a company.

10. Give an example of a story on Tableau.

A story is a combination of worksheets or dashboards that convey a message as a whole.

An example of this would be a combination of two worksheets that depict the employee performance of a company. While one worksheet has performance metrics and summaries of employees in the levels L1 to L3, the second one can have the same data of employees in the levels L3 and L4 (upper management). Since the employee performance is interdependent, this can provide a bird's eye view of the whole performance of the company's workforce.

This is used when the parameters and measures are different between the worksheets.

11. What is an embedded data source? How is it different from a published data source?

An embedded data source contains information that is connected to a workbook. A published data source works independently.

12. What is DRIVE Program Methodology?

It is a product of iterative sessions previously used and tested by enterprise deployments. It is based on best practises and allows a user to follow a specific set of actions to avoid errors and expedite reporting or visualization process.

13. Joins vs. Blending in Tableau.

Joining data means combining two sets of data from a single source (an Excel sheet, for example). Blending data involves the usage of two different sources (an Excel sheet and an Access report).

14. What is a TDE file?

TDE is a file extension type exclusive to Tableau which stores information sourced from third-party sources such as Microsoft Excel. It is similar to a spreadsheet.

15. What is a dual-axis?

It is a function in Tableau that showcases two scales of two measures in a single graph. This is very similar to the function found on Microsoft Office products where a single graph has line and bar elements. In most cases, it has either two X or two Y axes.

A dual-axis is typically used to show trend lines and historical data. An example would be total revenue vs profit across 12 months.

Additional Tricky Tableau Questions

In addition to these tool-specific questions, interviewers may also test whether you are capable of managing the tool and talking to the client. These questions may be asked to see if what you know about Tableau was not done through rote learning.

Here are some trick questions to be aware of:

- Is Tableau a good tool for business analysts? (Yes)
- Tableau is a Windows-only tool. True or False? (False, it is available for Mac too)
- Is there a limit in the number of rows and columns? (No)

Tableau Interview Questions and Answers

1. What is data blending in tableau?

Ans: Data blending is an advanced joining of two different data sources. For example, one data source contains annual sales of a product in different countries and second data source contains countries and their monthly profit and loss values. A simple join won't work in this case because of different levels of segregation. First step will be to aggregate the values in second data source based on year and then perform a join. All these steps can be completed with great ease in tableau. Because tableau can identify the common field of country and year between two data sources and perform a post aggregate join by itself.

2. What is LOD in tableau?

Ans: Full form of LOD is Level of Details. LOD is used to define the level of granularity to compute values at data source and visualization levels. It is applied using calculated fields. First keyword defines the type of LOD expression that is to include or exclude a specific field while performing the aggregation on the required field.

3. How to install tableau?

Ans: To install tableau on your system you need to download the installation file from: https://www.tableau.com/support/releases. Select the required type from left pane that is Desktop, Prep, Online, Server and Mobile. Once the installation file is downloaded just install the product on your system by following the steps and please note that tableau desktop comes with a trial period of 14 days for that you need to register using your email id and rest all the types of Tableau are paid and mostly used in industry. You can also go for the tableau public which is an open source tableau tool with lifetime validity. For using Tableau Public visit: https://public.tableau.com/en-us/s/download and enter your email id then click on download the app. The download will begin itself and after the download is completed install the file on your system and sign up using the same email id you used for downloading the file. The drawback for using tableau public is that you cannot save the file on local system you can only save on tableau public's online server and hence making it visible to anyone with the link and giving them the authority to download your work.

4. What is a parameter in the tableau?

Ans: A parameter is used to replace a constant value from calculations, filters and reference line. A parameter can be a number, date or string datatype. A user can be given direct control over parameters to modify the filters and calculations based on the requirements.

5. What is context filter in tableau?

Ans: Context Filter can improve the view performance of the dashboard when using more than one filter. A filter in tableau will be executed over all the rows in the dataset independent of others filters in place. By using a context filter we can reduce the size of dataset and then rest of the filters will be executed on the leftover dataset hence reducing the time of execution.

6. What is kpi in tableau?

Ans: Tableau makes it easier to analyse the effectiveness of a company based on some key indicators by the use of Key Performance Indicators in shapes card. First step is to create a calculated field and then mark the values as success and failure based on the required parameter. Then plot a chart using a dimension and the created calculated field and change automatic to shapes in the marks card. Then assign success and failure to Kpi in shapes card for simplified and better understanding.

7. How to create donut chart in tableau?

Ans: There is no direct way to create a donut chart in tableau but there are two tricks to create it. If you want to show a donut chart in a sheet first of all plot a pie chart and then add another measure to rows shelf. Now you can see two pie charts on the sheet change the colour of second pie chart to match the background colour and reduce its size, now right click on second instance in rows shelf and select dual axis then remove all the details which are not required. The second way to create a donut chart will work only in a dashboard. First create a pie chart in a sheet and import it to dashboard then place a circular image with same colour as of the background and move it to the centre.

8. What is tableau server?

Ans: Tableau server is used to organize, edit, share, and collaborate on Tableau dashboards created on Tableau desktop. It is safer for organizations as the data will be private to the members of the company and also administrator has the power to give limited control to its user such as only view or edit or both depending on the requirement.

9. How to create dashboard in tableau?

Ans: A tableau dashboard is the final step in creating the visualization. First of all, create all the charts in different sheets and then click on add new dashboard in the bottom most tab from where you were adding new worksheets. You can also right click on the add new sheet button and there you can select add new dashboard instead of a sheet. There is one more way to add new dashboard, go to dashboard in toolbar then select new dashboard. After following any of the above three ways you will get a new dashboard where you can drag the required sheets

from left panel to the dashboard one by one and start applying your creativity to create an understandable story.

10. What is bin in tableau?

Ans: Bins in tableau are containers of equal size used to store data values fitting in bin size. In other words, bins group the data into groups of equal size or data which can be used in systematic viewing of data. All the discrete fields in tableau can also be considered as set of bins.

11. What is analysis in tableau?

Ans: Tableau comes with inbuilt features to analyze the data plotted on a chart. We have various tools such as adding an average line to the chart which tableau calculates itself after we drop the tool on the chart. Some other features include clustering, percentages, forming bands of a particular range and various other tools to explore and inspect data. All these tools are available in analyze tab on each sheet used to create any chart. The features become visible only when they are applicable to the worksheet.

12. How to create sets in tableau?

Ans: Sets are custom fields used to compare and ask questions about a subset of data. For creating a set on dimension, right-click on a dimension in data pane and select create -> set. In general tab select the fields that will be considered for computing the set. Specify the conditions to create set in conditions tab and you also have the option to select top N members in dataset based on any field in the top tab. When a set is created it divides the measure into two parts namely in and out of the set based on the conditions applied by the user.

13. What is quick filter in tableau?

Ans: Whenever using a filter in Tableau, it comes with some options to change the functionality of filter very easily, such as using it as a single value drop down or single value list or multiple value list or multiple value drop down and various other options. After we set a filter to a sheet just right click on the sheet and there you can see all the quick filter options. Changes made to these options will also change the aesthetics of filter shown on the sheet.

14. What is tableau desktop?

Ans: Tableau desktop is a product of Tableau which is used to create, edit and store data visualizations locally on a system. You have an option to publish the visualizations to server, online or public after its completed or maybe in between the process also depending on the requirements. Tableau desktop also allows its user to edit any file created on another system and in a same or lower tableau version.

15. What is page shelf in tableau?

Ans: Page shelf in tableau helps to understand multiple charts in a more friendly and useful ways. If we are getting multiple plots in a single sheet and you want to view it one by one then drag and drop the dimension which is responsible for creating multiple charts instead of a single chart to the page shelf. Then we get a option on right side to scroll through different charts one by one and analyze the data.

16. How to calculate percentage in tableau?

Ans: To calculate the percentage of data on your worksheet. Go to Analysis pane and select Percentages of, there you will see a lot percentage options such as percentage of table, column, row, pane, row in pane, column in pane and cell. Select any of the above options then define the total value o which percentage is to be calculated. The option you choose will be uniform to all the rows and columns and there is no way to specify different options to rows and columns.

17. What is tableau developer?

Ans: A tableau developer is one who knows how to create data visualizations and meaningful insights from raw data in tableau. A tableau developer should know how to create advanced dashboards that are easy to be used by other people and will be handy to them to understand the data easily

18. What is tableau data engine?

Ans: Hyper is used for Tableau's in-memory Data Engine. It helps importing and analysing the data at a faster rate. It allows user to create an extract file of data set which can be considered as a compressed version of dataset containing all the data hence increasing the speed of executing different queries on dataset. It helps the user to work on big datasets with greater ease.

19. What is the difference between tableau and power bi?

Ans: Tableau performs better as compared to Power Bi on huge data sets. Tableau's customer support is better for free as well as paid users but Power Bi only have dedicated customer support for paid users. Tableau can connect multiple data sources and also allows the user to store information on the server whereas Power Bi have limited connections to data sources and focuses on reporting and analytical modelling instead of storing data. Power Bi has better graphical user interface as compared to Tableau, it is very easy to use software.

20. How to hide dashboard in tableau?

Ans: There is no way to hide a dashboard in tableau but it is possible to do so if you are publishing the dashboard to a website there you can set a command to show dashboard only when a particular button is clicked. And instead of hiding a dashboard you can go for hiding sheets before publishing the dashboard. So that by default when people view your viz only the dashboard will be visible to them and not the individual sheets.

21. How to use groups in calculated fields in tableau?

Ans: Create a group by right clicking on a field in data pane and select create -> group and select the fields to be grouped the general tab and define the condition for grouping in conditions tab. Then right click on this group and select create -> set and then right click on the set or any empty place in the data pane and select create calculated field then you can use this group as a set in this calculated field.

22. How to create hierarchy in tableau?

Ans: By default, tableau creates some hierarchy of data source based on the values in the fields. There is a custom way to create your own hierarchy. In Data pane just drag a field on top of another field then enter the name of hierarchy in the prompt and press ok. Then you can add additional fields into hierarchy also. Creating a hierarchy can help you to easily scroll through the categories of data you created which may be data based on location such as country, state, city, or region.

23. How to connect r with tableau?

Ans: First of all, download and install R to your system, then install a package known as Rserve using the command: install. packages ("Rserve") and once installed you don't need to perform this step every time you are trying to use R from tableau. Whereas the next steps are required to be executed every time you want to connect R with tableau. Now use the command: library (Rserve) to import the library to current working environment and then type Rserve() in the command window to connect R with Tableau. Now switch to Tableau and under help menu and select "Manage R connection", enter sever name as "Localhost" and a port of "6311". Click on "Test Connection" button to make sure that everything is working fine and finally click on Ok to close.

24. What are the limitations of tableau?

Ans: Tableau provides limited data pre processing because it is mainly designed for data visualizations. The layout of dashboards gets disturbed when opened on a different resolution screen. Price of Tableau is also high and they do not provide any custom plans for enterprises based on their requirements. For free users using Tableau and publishing their work on tableau public can create security issues as it does not provide any security to files uploaded on tableau public server.

25. Why is data aggregation or disaggregation necessary for creating charts in tableau?

Ans: Aggregation and disaggregation commands tableau to combine data based on user requirement. If you want to create any chart than there are specific requirements of the chart to be made such as 1 dimension or 2 dimension and 1 measure or 2 measure. And for measures one need to specify the aggregation that is sum, median, average etc. or else by default all the values will be shown as sum. And the user might want to see a different outcome from the chart.

So, it is very important to use the correct aggregation method or to disaggregate the data if required.

26. How to use custom SQL in tableau?

Ans: A custom SQL can help a user to extract the information you need. A custom SQL query can be written after connecting tableau to a data source. Once connected to a data source, double-click the “New Custom SQL” option on the data source page. Then type or paste the SQL query to the text box and when finished click OK.

27. How to connect mongodb with tableau?

Ans: An additional driver may be required to connect with Mongodb. I suggest you to download and install driver from: https://www.tableau.com/support/drivers. Once installed now open tableau and under connect select Mongodb BI connector (if you can’t find it in the main list, under “To a server” menu you see an option named”More”, there you can find Mongodb BI connector). Then enter the name of server, enter username and password associated with the database. Select the “Require SSL” check box when connecting to an SSL server. Then select “Sign in”, now you are good to go with the data source.

28. What is cascading filter in tableau?

Ans: Cascading filters can also be understood as giving preference to a particular filter and then applying other filters on previously filtered data source. Right-click on the filter you want to use as a main filter and make sure it is set as all values in dashboard then select the subsequent filter and select only relevant values to cascade the filters. This will improve the performance of the dashboard as you have decreased the time wasted in running all the filters over complete data source.

29. What is tableau reporting tool?

Ans: Creating a dashboard is also considered as reporting because once you are done designing the dashboards per client’s requirement it can be used in ppt or pdf or any required filetype and its compatibility with the view created. These dashboards can be interactive so that the client can set the filters and parameters to view custom charts under different conditions.

30. What is view in tableau?

Ans: Any visualization created on a data source in a worksheet is known as view. A view can be anything, a plot, a chart, a graph or even a table can be a view. These views are then compiled on a dashboard to create final story and link them to each other.

31. How to improve performance in tableau?

Ans: There are a number of ways to improve the performance and very basic trick among all is to use extract option on data source it is one of most powerful tools to improve the performance.

Once you have completed the dashboarding then run the performance recorder from help menu, it will give you the specific sheets which are slowing the performance of your tableau. You should try to reduce the marks in your view. Try use less numbers of filters or if required then use include instead of exclude field. Use the context filter to filter huge chunks of data and also try to use cascade filters to reduce the query execution time.

32. What is workbook in tableau?

Ans: A workbook is a complete set of sheets, dashboards and stories which you have created in tableau desktop or public and saved on your local system or either published it on tableau public. You download the workbook of tableau public from its website link.

33. What is the minimum version of android os required to run tableau mobile?

Ans: Tableau mobile can be run on devices with android 7 or higher versions. Tableau mobile is used to view visualizations created on tableau desktop, tableau server, tableau online.

34. What is live and extract in tableau?

Ans: Extract is a snapshot of the data optimized for aggregation. Extracts are loaded into the system and hence improve the performance of tableau. Whereas extracts won't help in situations where data is updated continuously because then we manually need to refresh the data for all the updates but using a live connection might slow the processing but will definitely update the data source itself. So, live connection should be used only when data is continuously updating otherwise extract file is preferred.

35. What is scatter plot in tableau?

Ans: A scatter plot is used to create a visualization between two or more measures with or without dimensions. To plot a scatter plot atleast one measure in row and one measure in column is required then further detailing can be done using various dimensions marks card over colour and details. Scatter plot plots the datapoints on an empty place and those datapoints take some sort of shape based on the values in measures.

36. How to create stacked bar chart in tableau?

Ans:

A stacked bar chart can be created by following steps:

1. Drag a dimension to columns shelf.
2. Use "Measure Names" on colour in the marks card.
3. Right click on "Measure Names" and make it as a filter and select the checkboxes for the measures to display.
4. Now drag "Measure Values" to rows shelf and change the chart type to bar in marks card.

Your stacked bar chart is ready now you can change the size and colours as per your creativeness.

37. What is the use of cycle fields in tableau?

Ans: Cycle fields help in switching and trying different colour combinations or views in a cyclic order. It will work only if we have a chart that allows more than one measure such as stacked bar chart and we are unable to finalize the visualizations then we can use cycle fields. To use cycle field, click on analysis menu in the toolbar then select cycle fields to take a quick look at an alternative visualization.

38. What are marks in tableau?

Ans: Marks card is very useful in detailing the chart as it can be used to give different colours based on a category and change the size of line or circle or bars in the charts based on any measure value. Marks card is also used to set labels on the chart and also provide detailing to the view. It is also used to manage the tooltip and format the tooltip which should improve the visualizations.

39. How to integrate tableau with website?

Ans: To integrate Tableau with a website, developer needs to have complete understanding of Javascript API for tableau. It contains all the types of functions required to view and control a tableau worksheet and dashboard directly from the website instead of interacting directly with the worksheet. Tableau has provided a complete list of functions used in Javascript API and implementation of some of the important functions is explained in the tutorial section also which is free for all users. All the tableau dashboards or worksheets when published on tableau public or online or server are integrated with the Javascrip API by default developer only needs to call that API in the HTML code and start interacting with it.

40. How to show axis in tableau?

Ans: You can show and hide axis based on your requirements. Right click on the axis and deselect show header to hide the axis. To show the axis right-click on the fields in row or column and select show header to bring back the hidden axis.

41. How to add logo in tableau dashboard?

Ans: In the objects pane in dashboard there is an option to import image. Make sure that you have selected the floating type instead of by default tiled option. Drag and drop image object to dashboard and then select the logo from your system saved in .jpg, .png or .jpeg format. To use it as a background user can use the small drop down option on the right side of the image and select send to back and then increase the size of image so as to make it as a watermark logo.

42. What is the difference between .twb and .twbx extension?

Ans: A .twb file contains information on all the sheets, dashboards and stories, but it won't contain any information regarding data source. Whereas .twbx file contains all the sheets, dashboards, stories and also compressed data sources. For saving a .twbx extract needs to be performed on the data source. If we forward .twb file to someone else than they will be able to see the worksheets and dashboards but won't be able to look into the dataset.

43. How to clean data in tableau?

Ans: Sometimes data file may contain some description at the top or bottom of the file. Tableau will not be able to understand the data as it is. After connecting to the data file, you need to turn on the data interpreter available in the left panel. It will remove the unwanted rows from the data source in tableau without making any effects on the file from where the data is being used.

44. How to publish tableau reports to tableau server?

Ans: Open the workbook which you want to publish to tableau server. Make sure you are on an active sheet which is to be published to the server. Otherwise you won't be able to see the "Publish Workbook" under the "server" menu in the toolbar. Once you click on Publish Workbook then sign in to your tableau server account and give the name you want to save it with on the server.

45. How many maximum tables can you join in Tableau?

Ans: Tableau allows its user to join a maximum of 32 tables.

46. What is assume referential integrity in tableau?

Ans: Assume referential integrity is useful in cases where you know that two data sources have same references in a column. Then you can use the assume referential integrity feature to define the relation between both the data sources and perform a join on two data sources. To implement referential integrity, drop second table on side of the first table and then it will ask you to match the column to perform join then select the reference column and tableau will join based on the reference and type of join provided.

47. How to group in tableau?

Ans: A group is used to combine similar members in a field. There are multiple ways to create groups either by selecting data in view or from a field in the Data pane. Select multiple data points in view and then an option to group appears on the tool tip, you can use that option to create a group. Another way to create a group is from Data pane, Right click on a field and select create -> group. Now you can select several members that you want to group and then click group.

48. How to generate longitude and latitude in tableau?

Ans: Generating longitude and latitude is very easy in tableau. Drag and drop countries or states or cities or any geographical field to the view and tableau automatically plots the places on the map. Then select all the data points and right-click then select view data. In the view data tab, you can see the generated longitude and latitude in front of the related country name. This data can also be exported from tableau to be used in another software or maybe in another data source.

49. How to increase size of pie in tableau?

Ans: Creating a pie chart requires atleast one measure and one dimension in row and shelf column. Then you can select a pie chart from either the show me option on the right side of the screen or from the marks card change automatic to pie. Then give some detailing to the pie chart by using a dimension in colour and measure in angle. Option to increase the size also comes under marks card. Click on the size option and then move the slider towards right to increase its size.

50. How to add custom colors in tableau?

Ans: Tableau offers various colour palettes which a user can use to define a legend or to be used in formatting. But sometimes due to client's requirements we need to use some specific colours in our view. So instead of defining the colour each and every time you can create a custom palette which can be used whenever you open a workbook. To create a custom colour palette, go to "My tableau Repository" in the documents folder of your system. Open "Preference.tps" file in a text editor to create the custom palette. By default, the file will be empty with just opening and closing line of workbook. You need to define the colour palette in between these two lines and there are three types of colour categories that can be defined. One of them is categorical which is defined using type = "Regular" and second one is sequential and it comes under the type = "ordered-sequential" and last comes diverging colour which is of the type = "ordered-diverging". Also, kindly note that the colour should be defined in the HTML #RRGGB order.

51. What is the file extension for tableau packaged data source?

Ans: A tableau packaged data source is a zip file with extension (.tdsx) containing all the data source files(.tds) which contains all the calculated fields, groups and any other changes that have been made on the original data with original data as well. Tableau packaged data source also contains extract files (.hyper or .tde), excel files, access files. This .tdsx file can be used as a single file to handover the dataset to someone who does not have direct access to original data set.

52. What are the different Tableau Products and what is the latest version of Tableau?

Ans: Tableau comes with a range of products. Tableau desktop, Tableau Public, Tableau Server, Tableau Online, Tableau mobile and Tableau prep as well. Tableau also keeps on updating its product with new versions each year. Currently the latest version is 2020.3.

53. What is Tableau Data Server?

Ans: Tableau data server is a feature provided with Tableau server which allows its user to store Data extracts on one centralized server which can be accessed by different users to draw some visualization and analysis on data based on their understandings. This feature helps reducing the memory occupied by data storage because one extract can be used at multiple systems simultaneously.

54. What are sets and groups?

Ans: Sets and groups are used group data based on some specific conditions. The main difference between these two is that a group can divide the dataset into multiple groups whereas a set can have only two options which is either in or out. A user should choose to apply group or sets based on the requirements.

55. What is a dual axis?

Ans: For better visualization and comparison of two fields create two charts on same sheet by adding two fields either in the rows or columns shelf and use one field in another shelf. Now right click on the axis you want o perform dual axis on and select the dual axis to merge both the graphs. This comes in very handy for comparing two different measures on same dimension.

56. How to do Performance Testing in Tableau?

Ans: Performance testing in tableau is very important as it will let you know how your workbook will operate once you make it publish it into the real world scenarios. To perform the performance testing first step is to set up test environment in tableau server and disable any automated or scheduled extract refresh schedules. Second step is to capture performance metrics using Tabjolt or any other tool then upgrade the test environment and run Tabjolt to check workbook performance. If there is no difference in performance then use a subset of workbooks to again test the performance after doing an extract refresh.

57. Name the components of a Dashboard.

Ans: Left pane of the dashboard shows two tabs, named dashboard and Layout. By default, when you create a new dashboard the user will land of dashboard tab. First button is of device preview which allows the developer to understand the preview of the dashboard on different devices such as tablet, mobile and desktop. Next comes the size of dashboard which can be modified by the developer. After that there is the option to drag and drop sheets to be used in the dashboard. And then there is the option to use various objects such as image, webpage, text, horizontal container, vertical container, blank, navigation button and extensions. Then we have the option to switch to Tiles or Floating option before using the sheets or objects on the dashboard, although we have the option to change this setting at a later point but we should prefer using these buttons. And the last option in this tab is a checkbox of show dashboard title. Now the next tab “Layout” is used to define the size of various floating objects on the dashboard

and also setting their x and y coordinates to define their locations. Then we have the option to draw the border on the outer side of the charts and objects and also, we can change the background colours of from here.

58. How to create stories in Tableau?

Ans: A Tableau story is similar to the dashboard and sometimes used in place of it. You can create different tabs dedicated to individual sheets and set a navigation button for the functionality of the same. First of all, create all the charts in different sheets and then click on add new story in the bottom-most tab from where you were adding new worksheets. You can also right-click on the add new sheet button and there you can select add new story instead of a sheet. There is one more way to add a new story, go to the dashboard in the toolbar then select a new story. After following any of the above three ways you will get a new story where you can drag the required sheets or objects from the left panel to the story one by one. You can also import dashboards to a story but vice versa is not possible. In a story mode, you have to define the buttons to shift from one page to another.

59. What is bar-plot?

A bar-plot is a pictorial representation with the help of which we can understand the distribution of categorical variables.

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60. What is a histogram?

A histogram is a visual representation with the help of which we can understand the distribution of numerical data.

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61. What is a scatterplot?

A scatter plot is a visual representation of with the help of which we can understand the relation between two continuous variables.

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62. How can you load an excel file in Tableau?

On the main page, you would have the “connect to” pane on the left side. From there, you can select “Microsoft Excel”

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63. How can you load a PDF file in Tableau?

On the main page, you would have the “connect to” pane on the left side. From there, you can select “PDF File”

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64. How can you load a JSON file in Tableau?

On the main page, you would have the “connect to” pane on the left side. From there, you can select “JSON file”

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65. What is a box-plot?

With the help of a box-plot you can understand the relationship between a categorical variable and numerical variable.

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66. What do you understand by inner join in Tableau?

With the help of inner join, we can combine two tables where the resultant table is a combination of common records of both the tables

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67. What do you understand by left join Tableau?

With the help of left join, we can combine two tables, where we will get all the records from the left table but only the matched records from the right table

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68. What do you understand by right join in Tableau?

With the help of right join, we can combine two tables, where we will get all the records from the right table but only the matched records from the left table.

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69. What do you understand by full join in Tableau?

With the help of the left join, we can combine two tables, where we will get all the records from the right table and also all the records from the left table.

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70. What do you understand by pivoting in Tableau?

There would be a lot of issues with raw data. Sometimes, we might have data in the form of a wide-format instead of a long format. If we would want to convert this wide form data into long-form data, we can use pivot.

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71. What is the use of a split in Tableau?

Sometimes the data present in a particular column could comprise of a lot of things. For example - “Full Name”. If we have a name such as ‘Adam Reddy’. Here, this ‘Full Name’ can be divided into two parts - ‘First Name’ and ‘Last Name’. For this purpose, we can use split.

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72. What are the different data types in Tableau?

These are the different data types in tableau:

- Number
- Text
- Date-Time
- Geographical Values
- Boolean

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73. How can you rename a column in a table?

You can just double click the name of the column and give in the new name over there.

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74. How can you hide a column from a table?

When you hover the mouse over the name of a column, you will get a triangle symbol. When you click the triangle symbol, you will have a lot of options over there. One of those options is ‘hide’. When you click on this, the column can be hidden.

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75. How can you get more information about a particular column?

Every column gives you the describe option. When you click on the describe button, you will get more information about that particular column.

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76. How can you sort a particular column in a table?

Every column has these three lines. When you click on that,you can either sort that in ascending order or descending order.

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77. How can you convert a ‘number’ type column into a ‘string type’ column?

If it is a numerical column, it will have the # symbol above it. When you click on the # symbol, it will give you a drop-down list. From that drop-down list, you can select ‘String’.

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78. Can you convert a string type column into a number type column?

No, it is not possible to convert a string type column into a number type column. When you do this, all the values would change to null.

Tableau Interview Questions FAQS

Q: How do I prepare for a tableau interview?

A: To prepare for a tableau interview, you need to have a strong understanding of the basics and also create visualizations in Tableau. You must focus on the concepts, should know about the dimensions as well as facts, have good knowledge about the best practices of visualizations and how to create a dashboard. You must be sure about the charts that you like or dislike, etc.

Q: What are the benefits of a dashboard tableau?

A: It enables even non-technical users to come up with real-time visualization in minutes. In only a few clicks, the data sources can be combined, add filters, and breakdown into particular information.

Q: What are the challenges faced in tableau?

A: The challenges faced in tableau include Troubleshoot Trusted Authentication, Handle an Unlicensed Server, Handle an Unlicensed VizQL Server Process, Cookie Restriction Error, Troubleshoot Desktop License Reporting, Troubleshoot Server Processes, Troubleshoot Run As User, Troubleshoot Disk Space Usage on Tableau Server Nodes, and Cleaning Up Tableau Server-Related Files.

Q: What are Tableau skills?

A: You need a minimum Bachelor's Degree in Computer Science or Business. You must be proficient in Structured Query Languages as well as extensive data sets. The analytical skills should be excellent and you should be able to analyze the requirements of the business and the client. You must find the solutions for systems during the stage of prototyping as well as consumer testing.

Q: What are the cons of Tableau?

A: It is expensive, it has inflexible pricing, poor after-sales support, security issues, IT assistance for proper use, poor BI capabilities, poor versioning, embedment issues, and time- and resource-intensive staff training.

Q: What are the main features of Tableau?

A: It is easy to access from several sources. You will not need any technical or programming knowledge. You will get fast response for making a dashboard.

Q: What is Lod in Tableau?

A: Level of Detail (LOD) expressions are useful in running difficult queries that involve several dimensions at the data source level instead of getting the entire data to the Tableau interface. A very simple example is adding dimension to an aggregate value that is already calculated.

Q: How does Tableau handle large data?

A: Tableau is an end-to-end platform for data analytics that enables you to prepare, evaluate, collaborate, and share big data insights. Tableau tops in self-service visual analysis, enabling people to come up with new questions of governed big data and simply share those understandings through the organization.

Q: What is the Tableau file store?

A: In a Tableau file store, the extracts, as well as workbook revisions, are stored. It is basically an in-built Tableau Server process that is locally installed on the Tableau Server. In the Tableau Server 2020.1, Tableau Server can be configured to use external storage to store the File Store data.