Top 80 Tableau

Interview Questions

(With Answers)

Top 80 Tableau Interview Questions

📗 SECTION 1: Tableau Basics

1. What is Tableau?
Tableau is a powerful data visualization tool used for converting raw data into interactive dashboards and graphs.

2. What are the different Tableau products?

- Tableau Desktop

- Tableau Public

- Tableau Online

- Tableau Server

- Tableau Prep

3. What are dimensions and measures?

- Dimensions: Categorical data (e.g., Country, Category)

- Measures: Numeric, quantitative data (e.g., Sales, Profit)

4. What is a worksheet, dashboard, and story?

- Worksheet: Single view

- Dashboard: Collection of views

- Story: Sequence of dashboards or worksheets

5. What is a filter in Tableau?
Used to restrict the data displayed in a view.

🧹 SECTION 2: Data Connection & Preparation

6. What data sources does Tableau support?
Excel, CSV, SQL, Oracle, Google Sheets, Snowflake, SAP, and over 50+ connectors.

7. What is the difference between live and extract connection?

- Live: Real-time connection to the database

- Extract: Cached snapshot of the data, faster

8. What is a .twb vs .twbx file?

- .twb: Contains instructions to build the report (no data)

- .twbx: Packaged workbook including data and assets

9. What is a Tableau Data Extract (TDE)?
A compressed snapshot of data for offline use and better performance.

10. What is Tableau Prep used for?
For cleaning, reshaping, and preparing data before visualization.

📊 SECTION 3: Data Visualization & Charts

11. Name 5 common charts in Tableau.
Bar chart, Line chart, Pie chart, Map, Scatter plot

12. What is a dual-axis chart?
Allows comparing two measures in the same view with independent axes.

13. What is a combined axis chart?
Shows multiple measures on the same axis for easier comparison.

14. What is a heat map in Tableau?
A color-coded matrix that helps identify patterns and correlations.

15. What is a tree map?
Visualizes hierarchical data using nested rectangles.

16. What is a bullet chart?
Compares performance against a target using bars and reference lines.

17. What is a histogram?
Displays the distribution of a continuous measure.

18. What is a box-and-whisker plot?
Shows statistical summaries like median, quartiles, and outliers.

🧠 SECTION 4: Calculated Fields & Functions

19. What is a calculated field?
A custom field created using formulas to extend data.

20. Difference between table calculation and calculated field?

- Table calculation: Computed on displayed data

- Calculated field: Computed at row-level before display

21. Name a few table calculations.

- INDEX()

- RANK()

- WINDOW_SUM()

- RUNNING_SUM()

22. What is LOD expression?
Level of Detail expressions control the granularity at which calculations are performed.

23. Types of LODs in Tableau?

- FIXED

- INCLUDE

- EXCLUDE

24. Syntax of FIXED LOD?

```
{FIXED [Region] : SUM([Sales])}
```

25. What is difference between INCLUDE and FIXED?

- INCLUDE: Adds dimension to existing view level

- FIXED: Ignores view level and fixes the dimension

26. When to use FIXED LOD?
When the calculation must remain the same regardless of filters in the view.

📂 SECTION 5: Filters in Tableau

27. Types of filters in Tableau?

- Extract Filter

- Data Source Filter

- Context Filter

- Dimension Filter

- Measure Filter

- Table Calculation Filter

28. What is a context filter?
Used to create a dependent filter; it acts as a primary filter.

29. What is cascading filter?
One filter affects the options available in another.

30. What is a quick filter?
UI element allowing users to dynamically filter data.

🎯 SECTION 6: Maps & Geographical Data

31. What is geocoding in Tableau?
Translating location data (e.g., city, country) into geographic coordinates.

32. How to show cities on a map?
Use the geographic dimension (like City) and drag it to the view; Tableau maps it.

33. What is a filled map?
Displays geographic areas filled with color based on a measure.

34. How to plot multiple layers on a map in Tableau?
Use dual-axis and synchronize both axes.

📈 SECTION 7: Performance Optimization

35. How to improve Tableau dashboard performance?

- Use extracts

- Reduce filters

- Limit data

- Optimize calculations

- Avoid large joins

36. How to monitor dashboard performance?
Use Performance Recording or Tableau Server logs.

37. When to use extract over live connection?
When performance is a concern and real-time updates are not needed.

38. How to reduce the size of a Tableau workbook?
Remove unused fields, hide sheets, use extracts, optimize joins.

🔒 SECTION 8: Security & Sharing

39. What is row-level security in Tableau?
Restricting data access per user using filters or calculated fields.

40. How do you implement RLS in Tableau?
Using user filters, Tableau Server username, and calculations.

41. How to publish a dashboard?
Via Tableau Server, Tableau Online, or Tableau Public.

42. What is Tableau Server?
Enterprise platform to publish, share, and manage Tableau content.

43. What is Tableau Public?
A free version of Tableau where dashboards are accessible publicly.

44. What is Tableau Online?
Cloud-hosted Tableau Server by Tableau.

🧩 SECTION 9: Joins, Blends & Relationships

45. What is the difference between join and blend?

- Join: At data source level

- Blend: At visualization level using linking fields

46. What types of joins does Tableau support?
Inner, Left, Right, Outer

47. What is a data blend in Tableau?
Combining data from two sources with a common field (primary and secondary).

48. What is a relationship in Tableau 2020+?
Logical layer connection that maintains native levels of detail.

💡 SECTION 10: Tableau Server & Admin

49. What is a project in Tableau Server?
A folder to organize workbooks and dashboards.

50. What are site roles?
User access levels like Viewer, Explorer, Creator, etc.

51. Can you schedule extract refresh in Tableau?
Yes, using Tableau Server or Tableau Online.

52. How to automate Tableau dashboard updates?
Using extract schedules or Tableau Prep Conductor.

🔄 SECTION 11: Real-Time & Advanced Topics

53. Can Tableau work with real-time data?
Yes, using live connections and auto-refresh options.

54. What is parameter in Tableau?
User input control used in calculations, filters, and reference lines.

55. Difference between filter and parameter?

- Filter: Based on field

- Parameter: Standalone and customizable

56. What is dynamic parameter?
Automatically updates its list of values based on the data source.

57. What is a dashboard action?
Used to filter, highlight, or navigate between dashboards.

58. What is a set?
Custom subset of data based on conditions.

59. Difference between set and group?

- Group: Combines members into one category
- Set: Dynamic or static subset for advanced filtering

✏️ SECTION 12: Scenario-Based Questions

60. How do you show top 5 and others in a bar chart?
Create a set or use a calculated field with RANK().

61. How do you compare current vs previous year sales?
Use `LOOKUP(SUM([Sales]), -1)` or `DATEADD()` with table calc.

62. How to calculate YoY growth?
`(Current Year Sales - Last Year Sales) / Last Year Sales`

63. How to show running total in Tableau?
Use the table calculation: `Running Total`.

64. How to apply multiple filters to one sheet but not others?
Use "Apply to selected worksheets" option.

⚙️ SECTION 13: Miscellaneous Questions

65. What is ZN() in Tableau?
Replaces nulls with zero.

66. What does ATTR() function do?
Returns a value if all rows have the same value; otherwise, returns *.

67. What is difference between COUNT() and COUNTD()?

- COUNT: All rows

- COUNTD: Distinct values only

68. How to handle null values in Tableau?
Use `IFNULL()` or `ZN()` functions.

69. What is a story point in Tableau?
A sequence of dashboards for data storytelling.

70. How to add reference line in Tableau?
Right-click on axis → Add Reference Line → Choose constant, average, or field.

💬 SECTION 14: Soft Skills & Best Practices

71. How do you choose the right chart?
Based on data type, insight goal, and audience.

72. How do you design for performance?
Use extracts, avoid complex joins, aggregate, limit filters.

73. What's the difference between workbook and dashboard?

- Workbook: Contains sheets and dashboards

- Dashboard: Visual combination of multiple sheets

74. How do you ensure dashboard readability?
Clear titles, fewer colors, intuitive layouts, proper filters.

🔍 SECTION 15: Integration & API

75. Can Tableau be embedded in web applications?
Yes, using Tableau JavaScript API or Tableau Embedded Analytics.

76. Can Tableau connect to Python or R?
Yes, using TabPy or R integration for advanced analytics.

77. What is Web Data Connector (WDC)?
Connects Tableau to web-based data sources via APIs.

78. Can Tableau be used for predictive analytics?
Yes, using trend lines, forecasting, and R/Python integration.

79. Can Tableau send alerts?
Yes, through data-driven alerts in Tableau Server/Online.

80. Can you automate Tableau tasks?
Yes, using Tableau REST API, Python, or Tableau Prep Conductor.